Notes

Freedom of Religion and Science Instruction in Public Schools

A controversy is raging over public school instruction in the origin of the universe and life. Just as many individuals have complained about school curricula that required instruction only in divine creation,[1] many individuals now object to curricula that involve instruction exclusively in the general theory of evolution.[2]

The debate has given rise to much activity.[3] In California the state board of education incorporated a creationist theory of the inception

1. *See, e.g.*, Daniel v. Waters, 515 F.2d 485 (6th Cir. 1975); Scopes v. State, 154 Tenn. 105, 289 S.W. 363 (1927).

2. The general theory declares "that all the living forms in the world have arisen from a single source which itself came from an inorganic form." G. KERKUT, IMPLICATIONS OF EVOLUTION 157 (1960). In considering this controversy, the "general" theory of evolution must be distinguished from the "special" or "limited" theory, which "states that many living animals can be observed over the course of time to undergo changes" through genetic variation and limited mutation. *Id.*

3. Recent litigation has challenged exclusive instruction in the general theory. Willoughby v. Stever, No. 1574-72 (D.D.C. May 18, 1973), *aff'd mem.*, 504 F.2d 271 (D.C. Cir. 1974), *cert. denied*, 420 U.S. 927 (1975); Wright v. Houston Independent School Dist., 366 F. Supp. 1208 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974). Numerous complaints against exclusive presentation of that theory have been filed with district and state boards of education. *See, e.g.*, J. HEFLEY, TEXTBOOKS ON TRIAL 43-51, 70-75 (1976) (describing parent and student complaints in Texas). Legislation requiring comparable attention to the general theory and a model of creation has been proposed in several states. *E.g.*, Act of Apr. 30, 1973, 1973 Tenn. Pub. Acts 1364, *reprinted in* Daniel v. Waters, 515 F.2d 485, 487 (6th Cir. 1975) (requiring that commensurate classroom attention be given to *Genesis* account of creation and to treatment of general theory); Acts & Facts, July-Aug. 1975, at i-iv (Institute for Creation Research Impact Ser. No. 26) ("Resolution for Equitable Treatment of Both Creation and Evolution") (recommending parallel presentation of scientific creationist model, not involving use of any sacred text, along with general theory). Articles debating the issue have been published in scientific journals. *Compare, e.g.*, Gish, *A Challenge to Neo-Darwinism*, 32 AM. BIOLOGY TCHR. 495 (1970) (presenting scientific creationist viewpoint) *and* Gish, *Creation, Evolution, and the Historical Evidence*, 35 AM. BIOLOGY TCHR. 132 (1973) (same) *with* Aulie, *The Doctrine of Special Creation* (pts. 1-2), 34 AM. BIOLOGY TCHR. 191, 261 (1972) (criticizing creationism) *and* Newell, *Evolution under Attack*, NAT. HIST., Apr. 1974, at 32 (same). And resolutions have been adopted in opposition to presentation of scientific creationism. *E.g.*, *A Statement Affirming Evolution as a Principle of Science*, HUMANIST, Jan.-Feb. 1977, at 4 (resolution published by American Humanist Association urging school boards, teachers, and textbook publishers to "[r]esist and oppose measures currently before several state legislatures that would require creationist views of origins be given equal treatment and emphasis in public-school biology classes and text materials").

of the earth and living forms into the public school science guidelines,[4] added publications espousing that concept to the approved textbook list, and almost required presentation of a model of creation along with the general theory of evolution.[5] Although the board later removed the creationist model from the science guidelines, it currently recommends presentation of that viewpoint in conjunction with other concepts in social studies classes that discuss the subject of origins.[6] A similar controversy is under way in Indiana, where the state textbook commission added to the approved list a book that presents both the general theory and a creationist model.[7] In several states, educational authorities have restricted exclusive presentation of the general theory[8]

4. The California Board of Education issued a statement of policy, in May 1969, that "[i]f the origins of man were taught from the point of view of *both* evolutionists and creationists, the purpose of education would be satisfied." J.A. Moore, *Creationism in California*, DAEDALUS, Summer 1974, at 173, 177. It then added two paragraphs to the state science framework, in November 1969, which stated that "scientific evidence to date concerning the origin of life implies . . . the necessity to use several theories," as in "other scientific disciplines, such as the physics of light." Although some religions adhere to special creation, "science has independently postulated the various theories of creation," so that "creation in scientific terms is not a religious or philosophic belief." *Id.* at 178.

5. The board tentatively adopted several scientific creationist texts for elementary school use in May 1972. It then held public hearings on the question of instruction in origins in which both scientists and religious groups testified on each side of the issue in November 1972. *Id.* at 180-81. A vote to provide equal treatment of the two models in textbooks narrowly failed by five ballots to three (six being necessary for passage) in December 1972. The board adopted a requirement for presentation of evolution as "theory" rather than as "scientific dogmatism" at that meeting, and, in February 1973, established guidelines for social science textbooks to include creationism along with the general theory in discussing origins. *Science and the Citizen: Creation Compromised*, SCIENTIFIC AM., Feb. 1973, at 46-47; J.A. Moore, *supra* note 4, at 183-84.

6. J.A. Moore, *supra* note 4, at 184. The board recommended that, because presentation of only the general theory might force some individuals "to choose between their system of belief and the evolutionary explanations," several viewpoints of human origin should be discussed "as part of the intellectual and cultural diversity of our society" examined in social studies courses. CALIFORNIA STATE DEP'T OF EDUC., SOCIAL SCIENCES EDUCATIONAL FRAMEWORK 38 (1975); Memorandum from Sup't of Pub. Instruction, Instruction to County and District Superintendents and School Principals (Feb. 26, 1976) (on file with *Yale Law Journal*).

7. The Indiana commission on December 12, 1975 added this biology textbook to the seven-book list from which school districts may select, and after a hearing upheld that action on March 18, 1977. Commission on Textbook Adoption (Mar. 18, 1977) (on file with *Yale Law Journal*). The state superior court held use of this book to violate the establishment clause of the First Amendment. Hendren v. Campbell, No. S577-0139 (Super. Ct. Ind. Apr. 14, 1977), *excerpted in* 45 U.S.L.W. 2530 (May 17, 1977).

8. Three large school districts have adopted the policy that creation be presented along with the general theory: Dallas, Texas; Columbus, Ohio; and Kanawha County, West Virginia. N.Y. Times, Jan. 28, 1977, § 1, at 10, col. 3; Board of Educ., Dallas Independent School Dist., Balanced Treatment of Creation Theories (Jan. 26, 1977) (on file with *Yale Law Journal*); Board of Educ., City Schools of Columbus, Policy Statement No. 71-8-83 (Spring 1971) (on "Teaching of Creation and Evolution Theories of Origins") (on file with *Yale Law Journal*); Letter from John F. Santrock, Jr., Superintendent of Kanawha County Schools (Nov. 25, 1977) (on file with *Yale Law Journal*). Two states, Arizona and Oregon, urge comparable attention to these perspectives, although they do not formally require it. ARIZONA DEP'T OF EDUC., WHAT EVERY CHILD SHOULD KNOW . . . SCIENCE: COURSE OF STUDY CRITERIA FOR TEXTBOOK SELECTION 18 (June 1973); State Dep't

and have approved textbooks containing a model of creation.[9]

Leading advocates of the creationist perspective do not endeavor to proscribe discussion of the general theory of evolution,[10] as did the law involved in the *Scopes* trial.[11] Nor in most areas do they attempt to introduce biblical creation into public schools. Instead they support "scientific creationism," a theory of the origin of the earth and life that employs scientific argument and not a sacred text in its challenge to the general theory.[12] Cast in this form, the conflict is not between science and religion, but between two theoretical models that build upon scientific observation and criticism[13] and that harmonize with some religions and have overtones contrary to others.[14]

of Educ., Guiding Statements on the Teaching of the Origin of Life in Oregon Elementary-Secondary Schools (Dec. 18, 1973) (on file with *Yale Law Journal*). Two other states, Texas and California, compel presentation of the general theory of evolution as theory rather than fact. Texas Educ. Agency, Policies of the Texas State Bd. of Educ. Series 3331.3(5) (undated) ("textbooks that treat the theory of evolution should identify it as only one of several explanations of the origins of humankind," and must approach the general theory as "theoretical rather than factually verifiable"); *see* note 5 *supra* (California).

9. State textbook commissions in five states have added to the approved list general texts or supplementary texts that present a model of creation. INSTRUCTIONAL MATERIALS SECTION, GEORGIA DEP'T OF EDUC., THE GEORGIA TEXTBOOK LIST 1977, at 163, 182 (1977); Idaho State Dep't of Educ., Textbook Adoptions 1976 addendum at III (Feb. 1976) (on file with *Yale Law Journal*); Commission on Textbook Adoption, Indiana State Bd. of Educ., Textbook Adoption: Science/Health & Safety 19 (Dec. 12, 1975) (on file with *Yale Law Journal*); TEXTBOOK SECTION, OKLAHOMA DEP'T OF EDUC., ANNUAL TEXTBOOK REQUISITION 1976-1977, at 100; STATE TEXTBOOK COMM'N, TENNESSEE OFFICIAL LIST OF TEXTBOOKS 48 (1976). The creationist texts on these lists are discussed in note 197 *infra*. School districts in at least three other states currently use textbooks containing the creationist approach to the origin of the universe and life. N.Y. Times, Jan. 28, 1977, § 1, at 10, col. 3 (Texas); Acts & Facts, Dec. 1976, at 1-2 (Institute for Creation Research) (Ohio); *see* R. BLISS, ORIGINS iii (1976) (Wisconsin).

10. Wade, *Creationists and Evolutionists: Confrontation in California*, 178 SCI. 724, 725 (1972) ("The creationists, although they personally do not believe that evolution occurred, are not asking that Darwin be evicted from the classroom.")

11. Scopes v. State, 154 Tenn. 105, 289 S.W. 363 (1927).

12. Wade, *supra* note 10, at 725-26 ("Nor, as they are sometimes accused of doing, are [creationists] trying to put Genesis into the biology books. . . . Their assertion is that the facts and subject matter explained by the theory of evolution can equally well be explained by a theory of creation . . . .") The foremost advocate of scientific creationism "encourage[s] a careful and objective study of both concepts of origins, on a scientific level only, in the public schools." H. Morris, Introducing Scientific Creationism into the Public Schools 1 (Institute for Creation Research 1975).

13. *See* pp. 554-61 *infra*. The foremost proponents of scientific creationism are scientists. The Creation Research Society, an association of scientific creationists, has approximately 500 members who hold advanced degrees in the natural sciences. BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY xxii (rev. ed. J.N. Moore & H. Slusher 1974). The Newton Scientific Association is a similar British group. The authors of creationist textbooks in general hold doctorates in science, and many teach at nonreligious universities. *See* note 198 *infra*.

14. Much support for the general theory is religious. The late Sir Julian Huxley provides a prominent example, in his advocacy of the "religion of evolutionary humanism," and the "Religious Humanism" movement provides another. *See* notes 206 & 211 *infra*.

The controversy over science instruction in public schools raises difficult constitutional issues under the First Amendment: whether exclusive presentation of the general theory of evolution in public school classes burdens free exercise of creationist religions, whether the peculiar characteristics of public schools make this burden substantial, whether the governmental interest in presentation of the general theory justifies the restraint on religious freedom, and whether available methods of relief would violate the First Amendment prohibition against establishment of religion. Because of the limited development of constitutional doctrine under the religion clauses and the obscure grounds for many of the decisions, no case directly settles these First Amendment issues. This Note's analysis, therefore, will rely upon inference from precedent and the purpose of the First Amendment. The Note will argue that exclusive public school instruction in the general theory of evolution, at the secondary and elementary levels, abridges free exercise of religion.[15] After considering the burden on the individual's religious exercise and the state interest in school curricula, the Note will discuss several alternative approaches to relief that are available to states or school districts.

I. Abridgment of Religious Exercise by Public School Instruction in the Origin of the World and Life

The First Amendment prohibits the state from abridging free exercise of religion.[16] Although the meaning of this restriction has never been clearly articulated, abridgment of religious exercise[17] in fact occurs only when there is contrariety between a governmental program or requirement and religious exercise, a burden upon that religious exercise, and an absence of a compelling state interest that justifies the burden.[18]

15. This analysis applies only to public secondary and elementary schools, not to colleges or nonpublic schools. *See* Tilton v. Richardson, 403 U.S. 672, 685-86 (1971); Meyer v. Nebraska, 262 U.S. 390, 402 (1923). It applies, moreover, only to schools that teach the general theory of evolution and not to public schools teaching only the limited theory and other biological concepts.

This Note does not discuss the contention that unneutral instruction in the general theory of evolution is an establishment of religion.

16. U.S. CONST. amend. I ("Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . . .")

17. The free exercise clause protects practices and convictions that are based on considerations tantamount to religious principles, held in sincerity by the individual, and comprehended in a bona fide religion. Wisconsin v. Yoder, 406 U.S. 205, 215-16 (1972); United States v. Seeger, 380 U.S. 163, 184-85 (1965); United States v. Ballard, 322 U.S. 78, 86 (1944); United States v. Kuch, 288 F. Supp. 439, 443 (D.D.C. 1968).

18. This analytic approach can be seen in recent free exercise cases. *E.g.*, Wisconsin v. Yoder, 406 U.S. 205, 211 (1972) (contrariety of Amish precepts to formal secular educa-

A. *Contrariety to Religious Tenets*

To provide a foundation for abridgment of free exercise, contrariety between governmental action and religious precepts must be present.[19] A comparison of the tenets of some religious faiths to the explanation in public school textbooks of the origin of the universe and life indicates the contrariety between religious doctrines of creation and the general theory of evolution.[20]

Many individuals adhere to religions that affirm divine creation as a cardinal tenet of faith. Creationist religions, which are both numerous and theologically diverse, include the Church of Christ, Independent Baptists, Jehovah's Witnesses, Orthodox Jews,[21] and many Lutherans,

tion beyond eighth grade); *id.* at 215, 217-18 (encroachment of compulsory attendance on beliefs and practices); *id.* at 218 (compulsion of objectionable conduct and values); *id.* at 215 (absence of a compelling state interest not otherwise served); Sherbert v. Verner, 374 U.S. 398, 399 (1963) (opposition of religious scruples to Saturday work); *id.* at 403 (burden on free exercise); *id.* at 405-06 (deterrence and penalization of constitutional liberties); *id.* at 406, 407 (nonexistence of a compelling state interest and availability of less intrusive alternatives). *See* Galanter, *Religious Freedoms in the United States: A Turning Point?*, 1966 WIS. L. REV. 217, 278-80. Other foundational principles for free exercise have been proposed by various commentators. *See, e.g.*, P. KAUPER, RELIGION AND THE CONSTITUTION 13 (1964) ("purpose of the constitutional system . . . to protect and promote religious liberty"); P. KURLAND, RELIGION AND THE LAW 18 (1962) (no "classification in terms of religion"); Giannella, *Religious Liberty, Nonestablishment, and Doctrinal Development*, 80 HARV. L. REV. 1381, 1390 (1967) ("balancing" of public interest against religious interest).

19. The religion of the individual, not the viewpoint of the majority or the perception of the court, determines the contrariety of religious exercise to governmental action. Courts do not assess the reasonableness or verity of the tenets of a bona fide religion sincerely held. United States v. Ballard, 322 U.S. 78, 87-88 (1944). They accept the religion's affirmations of its precepts and oppositions to other views, because free exercise includes the right to define both what religious conviction embraces and what it opposes. *See* West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 629 (1943) (accepting students' religious scruples against flag pledge and salute, and their characterization as worship of a graven image); *cf.* Wooley v. Maynard, 430 U.S. 705, 707, 715 (1977) (adopting petitioner's characterization of displaying state license motto "Live Free or Die" as ideological in nature and contrary to religious convictions).

20. One federal district court, in Wright v. Houston Independent School Dist., 366 F. Supp. 1208 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974), denied this contrariety. It asserted that "the offending material [in textbooks exclusively presenting the general theory] is peripheral to the matter of religion." *Id.* at 1211. *See* note 61 *infra*. Similarly, the producer of three major high school textbooks has claimed that biology texts "do not challenge or contradict religious principles" and "[s]cience is neutral with regard to the theological implications arising out of scientific investigation." Mayer, *The Nineteenth Century Revisited*, BSCS NEWSLETTER, Nov. 1972, at 7, 8, 12. Nevertheless, the following discussion shows creationist beliefs, regardless of their truth or falsity, to be entirely contrary to the general theory.

21. For example, the Seventh-day Adventist Church (495,699 members) believes that "creation . . . is affirmed in the Scriptures to be an immediate act that produced a wide variety of living forms virtually instantaneously." H. COFFIN, CREATION: ACCIDENT OR DESIGN? 399 (1969). It teaches that "God created the varied forms of plant and animal life on successive days of creation week," including Adam, and "[t]he sun, the planets, and their satellites" at once. *Id.* at 21, 39, 40. Subsequently, "Noah and his family were saved by miraculous preservation in the ark" from divine judgment by "a universal

Pentecostals, and other faiths.[22] The religious creationism affirmed by these faiths teaches that God supernaturally created the earth and life, that He directly formed all living kinds including Adam and Eve, and that God sent a worldwide flood destroying all mankind except Noah and his family. This doctrine ordinarily involves a literal reading of *Genesis*, a relatively recent time for God's creative acts, and a historical fall of the first human beings into sin.[23]

flood." *Id.* at 75, 467. For Brethren, see V. Flint, Genesis 8, 9, 10 (undated) (unpublished syllabus for Emmaus Bible School) (Plymouth Brethren; 70,000 members) (on file with *Yale Law Journal*); J. WHITCOMB, THE EARLY EARTH 21 (1972) (Grace Brethren; 37,727). For Church of Christ, see B. BAXTER, I BELIEVE BECAUSE . . . , at 123, 137, 167 (1971) (2,400,000). For Independent Baptists, see Articles of Faith art. v. (undated) (Baptist Bible Fellowship, 1,500,000; World Baptist Fellowship, 1,000,000); E. Gillentine, What We Believe 5 (undated) (American Baptist Association; 1,071,000) (on file with *Yale Law Journal*); General Association of Regular Baptist Churches, Constitution and Articles of Faith 5 (1972) (250,000); BAPTIST MISSIONARY ASSOCIATION, 1976 YEARBOOK 225 (215,788); Southwide Baptist Fellowship, Directory 1972-73, at 2 (130,000); W. Rector, Orthodox Baptist Confession of Faith 4 (1965) (Orthodox Baptist churches and other unaffiliated Baptist churches; membership not available); Gospel Fellowship Association, Bylaws, *Preamble* (1976) (10,000); New Testament Association of Independent Baptist Churches, Directory 6 (1976) (5,000) (on file with *Yale Law Journal*). *See also* EXECUTIVE OFFICE OF FREE WILL BAPTISTS, A TREATISE OF THE FAITH AND PRACTICE OF FREE WILL BAPTISTS 12, 13 (1974) (227,434). For Jehovah's Witnesses, see WATCH TOWER BIBLE & TRACT SOCIETY, DID MAN GET HERE BY EVOLUTION OR BY CREATION? 5, 50 (1967) (560,897). For Orthodox Jews, see Shapiro, *God, Man and Creation*, TRADITION, Spring-Summer 1975, at 25, 26, 28, 29 (1,000,000). For membership statistics, see generally YEARBOOK OF AMERICAN AND CANADIAN CHURCHES 233-39 (C. Jacquet ed. 1977) and materials on file with *Yale Law Journal*.

22. For Lutherans, see Brief Statement of the Doctrinal Position of the Missouri Synod 5 (1932) (2,763,545 members); Davis v. Page, 385 F. Supp. 395, 397 (D.N.H. 1974) (Apostolic Lutheran Church; 9,384 members). For Methodists, see The Faith and Life of a Free Methodist 8, 9 (L. Knox ed. 1976) (67,043); Southern Methodist Church, What, Why, How? 15 (undated) (11,000) (on file with *Yale Law Journal*). For Pentecostals, see Assemblies of God, Proposed Position Paper Concerning the Doctrine of Creation 2, 4, 6 (Apr. 5, 1977) (1,239,197) (on file with *Yale Law Journal*); D. Bowdle, Redemption Accomplished and Applied 21, 22, 27, 32 (undated) (Church of God, Cleveland, Tenn.; 343,249); Pentecostal Church of God, General Constitution and By-Laws 12 (1975) (135,000). For Presbyterians, see Westminster Confession of Faith chs. iv, v (Orthodox Presbyterian Church, 14,781; Reformed Presbyterian Church, Evangelical Synod, 23,719); Christian Reformed Church, Doctrinal Standards 7, 8 (1962) (287,503). For other faiths, see 68th General Council, Christian and Missionary Alliance, Statement of Faith ¶ 5 (undated) (145,833); C. Ryrie, We Believe in Creation 3 (1967) (Independent Fundamentalist Churches of America; 129,313) (on file with *Yale Law Journal*); Mennonite General Conference, Mennonite Confession of Faith 10-11 (1963) (Mennonite Church; 94,209).

Many individuals and churches within Mormonism, Roman Catholicism, and the Southern Baptist religion affirm belief in special creation. For Mormons, see M.A. COOK & M.G. COOK, SCIENCE AND MORMONISM 118, 120 (1967) (2,336,715 total members). For Roman Catholics, see Pius XII, *Humani Generis* ¶¶ 37, 38 (1950); P. Haigh, Thirty Theses Against Theistic Evolution (1976) (Catholic Center for Creation Research) (48,881,872 total members). For Southern Baptists, see Southern Baptist Convention, The Baptist Faith and Message 10 (1963); Adam and Eve, Real or Imaginary: Creation vs Evolution, Southern Baptist Journal, Jan. 1975, at 3 (12,733,124 total members).

For membership statistics, see generally YEARBOOK OF AMERICAN AND CANADIAN CHURCHES, *supra* note 21, at 233-39.

23. *E.g.*, Articles of Faith, *supra* note 21 (Baptist Bible Fellowship) (*Genesis* "is to be accepted literally, and not allegorically or figuratively"); J. WHITCOMB, *supra* note 21, at

The general theory of evolution,[24] as it is presented by the leading biology textbooks in public secondary schools,[25] embraces several key premises. It proposes origination of the universe and earth through natural processes[26] and naturalistic development of life from nonlife.[27] The general theory involves evolution of present living forms from this first organism through mutation and natural selection,[28] and en-

22 (Grace Brethren) (Bible warns against "such fable[s]" as "that God . . . employed natural processes . . . through vast periods of time" to create the world and life); Lutheran Church-Missouri Synod, A Statement of Scriptural and Confessional Principles art. v. (1973) (Adam and Eve's "fall was a historical occurrence") (on file with *Yale Law Journal*).

24. For description of the general theory, see G. KERKUT, *supra* note 2, at 6; note 2 *supra*.

25. The four most widely used high school biology textbooks are THE BIOLOGICAL SCIENCE CURRICULUM STUDY, BIOLOGICAL SCIENCE: MOLECULES TO MAN (3d ed. Houghton Mifflin Co. 1976) [hereinafter cited as BSCS BLUE]; BIOLOGICAL SCIENCES CURRICULUM STUDY, BIOLOGICAL SCIENCE: AN INQUIRY INTO LIFE (3d ed. Harcourt Brace Jovanovich 1973) [hereinafter cited as BSCS YELLOW]; BIOLOGICAL SCIENCES CURRICULUM STUDY, BIOLOGICAL SCIENCE: AN ECOLOGICAL APPROACH (3d ed. Rand McNally Co. 1973) [hereinafter cited as BSCS GREEN]; J. OTTO, A. TOWLE & M. MADNICK, MODERN BIOLOGY (Holt, Rinehart & Winston 1977) [hereinafter cited as MODERN BIOLOGY]. BSCS texts are used by "more than 50 percent of the American high school students" studying biology, and "100 percent of them are using materials that have been influenced by the BSCS, as publishers have followed the curriculum study lead." Mayer, *The BSCS Process of Curriculum Development*, BSCS NEWSLETTER, Sept. 1976, at 4, 8. *See* Hurd, *An Exploratory Study of the Impact of BSCS Secondary School Curriculum Materials*, 38 AM. BIOLOGY TCHR. 79, 81 (1976); Leonard & Lowery, *A Criterion for Biology Textbook Selection*, 38 AM. BIOLOGY TCHR. 477, 478 (1976) (noting extensive use of *Modern Biology*). One particular area in which BSCS texts have influenced all biology school texts is in thorough and integrated presentation of the general theory of evolution. Mayer, *supra* at 8; *see* Grabiner & Miller, *Effects of the Scopes Trial*, 185 SCI. 832 (1974).

26. *E.g.*, BSCS YELLOW, *supra* note 25, at 834 ("[T]he stars and their planets gradually condensed from a vast cloud of hydrogen . . . ."); BSCS BLUE, *supra* note 25, at 123 ("[P]rotoplanets were formed . . . from clouds of dust and gases that had been torn away from the edges of the sun. . . . [T]he protoplanets merged to form the earth.") For similar discussion, see BSCS YELLOW, *supra* note 25, at 702-03, 705, 834-35; MODERN BIOLOGY, *supra* note 25, at 253.

27. *E.g.*, BSCS YELLOW, *supra* note 25, at 837 ("Amino acids could have combined to form proteins." Then "self-organizing, self-reproducing blobs could have appeared" and "[m]utations that produced new proteins . . . eventually must have occurred. Still other mutations eventually led to cells . . . ."). For similar discussion, see BSCS BLUE, *supra* note 25, at 106, 113, 116-21, 123-24, 134-42, 162-64, 168, 180, 182-83, 205, 213; BSCS YELLOW, *supra* note 25, at 100, 196, 703-08, 786, 836-37; BSCS GREEN, *supra* note 25, at 277, 315-16, 396; MODERN BIOLOGY, *supra* note 25, at 149-50, 182.

28. *E.g.*, BSCS YELLOW, *supra* note 25, at 714, 716, 719, 786, 787 ("We look today upon all species as the products of a long evolution, going back to the origin of life itself." Fins of fish "evolved into the paired legs of chordates that live on land," such as amphibians. "[O]ne group of amphibians evolved into reptiles" and "the reptiles also gave rise to another class of chordates, the mammals." Then "[r]oughly 60 million years ago a mix of genes produced the Primates.") For similar discussions, see BSCS BLUE, *supra* note 25, at 89-94, 96-102, 105-06, 162, 225, 231, 233, 235, 236-37, 255, 259, 261-64, 267, 272, 282, 306, 348-54, 359-60, 362-64, 365-70, 380, 383, 388, 395, 400, 405, 419, 423, 435, 447-49, 455, 468-69, 472, 477, 490, 493-94, 504, 508, 510, 511, 522-23, 736-37; BSCS YELLOW, *supra* note 25, at 164, 179, 184, 190, 196-97, 207, 240-41, 250, 272, 287, 290, 293, 306, 312, 313, 319, 320, 326, 347, 414, 418, 423, 435, 519-20, 589-90, 605, 606, 686, 696-702, 708-25, 726-45, 746-62, 848, 862, 867-83; BSCS GREEN, *supra* note 25, at 138, 171, 317, 318-19, 320-27, 329-

tails evolution of human beings from ancestry common with apes.[29] It also postulates uniformitarianism—the concept that past physical processes acted much like present gradual processes—as the underlying key to the sequence of evolution and to the ages of the earth, life, fossils, and man.[30] Comparison of these premises of the general theory with the basic elements of the creation doctrine shows direct contradiction,[31] a contradiction that has been recognized not only by adherents to creation[32] but also by exponents of the general theory and by the courts.[33]

31, 337-47, 400, 457, 469, 477, 524, 586-87, 605, 609-14, 616-23, 626-28, 632-36, 698; MODERN BIOLOGY, *supra* note 25, at 150-61, 163-64, 252-53, 257, 260-61, 262, 264-66, 268, 272, 341, 367, 374, 412-13, 419, 421, 437-38, 441, 452, 454, 456-57, 458, 459, 465, 467, 468, 469, 471-73, 486, 488, 490, 493, 496, 500, 503.

29. *E.g.*, BSCS BLUE, *supra* note 25, at 382, 383-84 ("In the past hundred years, enough fossil evidence of man's evolution has been unearthed to confirm Darwin's theory about man's ancestry," that "[m]an shares a common ancestor with the modern apes.") For similar discussion, see *id.* at 372, 374-75, 378-84, 494, 716-19; BSCS YELLOW, *supra* note 25, at 722, 763-88, 789-805; BSCS GREEN, *supra* note 25, at 642, 649-53, 657, 661; MODERN BIOLOGY, *supra* note 25, at 166-67, 516, 517-21.

30. *E.g.*, BSCS GREEN, *supra* note 25, at 310 (Although "[s]ome people once thought" that "fossils were the result of the Great Flood," geologists instead "concluded that fossils are evidence of organisms that existed during past ages of the earth.") For similar discussion, see BSCS BLUE, *supra* note 25, at 90-92, 97; BSCS YELLOW, *supra* note 25, at 728-29, 757; BSCS GREEN, *supra* note 25, at 305, 312, 333, 607.

31. The general theory states that matter has existed without beginning and that the universe and earth reached their present forms by naturalistic processes, while the creation viewpoint teaches that matter appeared through direct creation by God in the beginning and that this creation occurred by supernatural plan. The former explanation asserts that life developed from nonlife and that present living forms including man evolved from those lower forms, whereas the latter declares that God created life from nothing and that He by direct act made living kinds including Adam and Eve. The one holds to a uniformitarian explanation of history and the antiquity of the earth and life, while the other involves the occurrence of a universal flood and a recent creation of the world and living kinds.

32. For example, the Assemblies of God believe that "Creation thus rules out the evolutionary philosophy which states that all forms of life have come into being by gradual, progressive evolution," and also "rules out any evolutionary origin for man." Assemblies of God, *supra* note 22, at 4. *Accord, e.g.*, WATCH TOWER BIBLE & TRACT SOCIETY, *supra* note 21, at 5; Lutheran Church-Missouri Synod, *supra* note 23, at art. v.

Creationists often assert that the general theory eviscerates not only essential religious tenets such as the creation of the earth and man or occurrence of the fall and flood, but also the very existence of God and the divine inspiration of scripture. *E.g.*, H. COFFIN, *supra* note 21, at 456-57 (Seventh-day Adventists express concern that the "books [an elementary school student] studies describe the origin of matter and life, and the subsequent development of animals and plants in a way much different from what he learned in Sunday school." Then in "high school science . . . classes the theory of evolution is presented in greater detail and as unquestionable fact." Consequently he "enters his career, strongly satisfied that . . . evolution is an undeniable fact . . . . Slowly, unconsciously perhaps, faith in God and His Word has given way to faith in a theory."); WATCH TOWER BIBLE & TRACT SOCIETY, *supra* note 21, at 127 (Jehovah's Witnesses).

33. Sir Julian Huxley noted that "[i]n the evolutionary pattern of thought there is no longer either need or room for the supernatural. The earth was not created; it evolved." Huxley, *The Evolutionary Vision*, in 3 EVOLUTION AFTER DARWIN 249, 252 (S. Tax & C. Callender eds. 1960). *See At Random*, in *id.* at 41, 45-46 ("Darwinism removed the whole

B. *Burden on Religious Exercise*

For contrariety between religious belief and state programs to provide a basis for abridgment of free exercise, a burden on religious liberty—actual interference with religious exercise—must be shown. Three types of burdens on free exercise can arise in the public school classroom: undermining of religious convictions, violation of religious practices, and compulsion of unconscionable declarations of belief. These burdens can interfere with religious exercise because of certain coercive features of public education: requirements of the academic program, conditions on enjoyment of public school instruction, and influence of teachers and peers.

1. *Types of Restraints on Free Exercise in Public Schools*

a. *Undermining of Creationist Beliefs*

Subjection of students in public schools to an academic program contrary to religious convictions may burden free exercise by undermining belief in essential religious tenets and by inducing belief in incompatible views. Although courts have not dealt with restraint on religious belief entirely apart from that on conduct, they have considered interference with both belief and practice.[34] The Wisconsin Supreme Court, for example, held that a compulsory education law abridged free exercise of the Amish religion.[35] Besides infringement

idea of God as the creator" because natural selection left "no room for a supernatural agency"); Thompson, *Introduction* to C. DARWIN, THE ORIGIN OF SPECIES at xxiii (1956) (general theory is "opposed" to the "Christian concept of the universe"). Justice Black also recognized the antagonism between the general theory and creationist religions. Epperson v. Arkansas, 393 U.S. 97, 113 (1968) (concurring opinion).

34. Through the years the Supreme Court has recognized that religious beliefs are inviolable, even though religious practices often may be regulated. Cantwell v. Connecticut, 310 U.S. 296, 303-04 (1940) ("[T]he [First] Amendment embraces two concepts,—freedom to believe and freedom to act. The first is absolute but, in the nature of things, the second cannot be."); T. EMERSON, THE SYSTEM OF FREEDOM OF EXPRESSION 22 (1970) ("holding of a belief is afforded complete protection" under First Amendment, a proposition "accepted consistently and without hesitation by all courts and commentators"). Because belief and action ordinarily are inseparable, the courts have abandoned the sharp distinction formerly employed to deny protection to some religiously motivated conduct. *Compare* Reynolds v. United States, 98 U.S. 145, 164 (1878) *with* Marcus, *The Forum of Conscience: Applying Standards under the Free Exercise Clause*, 1973 DUKE L.J. 1217, 1233-35 *and* P. KURLAND, *supra* note 18, at 22. This inseparability is evident in public school classrooms, since any impact on religious values from teachers or curricula occurs in the context of compelled student conduct such as attendance at the school, obedience to the faculty, and attention to the subject presented. *See* Schempp v. Abington School Dist., 177 F. Supp. 398, 406, 407 (E.D. Pa. 1959), *vacated and remanded*, 364 U.S. 298 (1960), *on remand*, 195 F. Supp. 518 (E.D. Pa. 1961), *aff'd*, 374 U.S. 203 (1963).

35. State v. Yoder, 49 Wis. 2d 430, 182 N.W.2d 539 (1971), *aff'd sub nom.* Wisconsin v. Yoder, 406 U.S. 205 (1972).

through compulsion of "affirmative acts which are repugnant to [the students'] religion," the court found infringement through the "impact" of "secondary school values [that] will make life as Amish impossible."[36] Affirming this decision in *Wisconsin v. Yoder*,[37] the United States Supreme Court ruled that the statute "contravene[d] the basic religious *tenets* and *practice* of the Amish faith."[38] It noted that the Amish faith involves a religious way of life that embodies not only theocentric community conduct and separatist practices but also doctrinal tenets and sectarian values,[39] and that the students' free exercise claim involved both religious belief and religious conduct.[40] The opinion emphasized the impact of compulsory education on religious convictions as well as on practices,[41] and indicated that the educational requirement undermined beliefs of Amish students in addition to compelling actions contrary to that religion.[42]

b. *Violation of Separatist Practices*

Subjection of students in public schools to classroom instruction that is predominantly adverse to their religious convictions may also burden religious liberty by violating free exercise of separatist practices. Many religions require that their adherents be separate from teachings and practices that conflict with religious tenets. A few faiths are absolute in their insistence on separatist practices and forbid any exposure to contrary belief.[43] A large number of religious groups are more

36. 49 Wis. 2d at 437, 438, 182 N.W.2d at 542.

37. 406 U.S. 205 (1972).

38. *Id.* at 218 (emphasis added).

39. *Id.* at 210-11, 216, 219, 235. The Amish oppose public school education beyond eighth grade because both removal from their community and the effect of the school curriculum and environment impede this religious way of life. *Id.* at 211, 217.

40. *Id.* at 220 ("[I]n this context belief and action cannot be neatly confined in logic-tight compartments.")

41. *Id.* at 211 ("Formal high school education . . . places Amish children in an environment hostile to Amish beliefs . . . [and] takes them away from their community . . . ."); *id.* at 210-11 ("[T]he values they teach are in marked variance with Amish values and the Amish way of life . . . ."); *id.* at 212, 216, 219, 235.

42. *Id.* at 212 ("In the Amish belief higher learning tends to develop values they reject as influences that alienate man from God," while elementary school education, which they accept, "does not significantly expose their children to worldly values or interfere with their development in the Amish community . . . ."); *id.* at 211, 211-12, 218; Note, *The Amish Exemption: A Constitutionally Compelled Exception?*, 34 U. PITT. L. REV. 274, 274-75 (1972).

43. An example of absolute separatism is the Apostolic Lutheran faith. It forbids adherents to "watch movies, watch television, view audio-visual projections, listen to the radio, engage in play acting, sing or dance to worldly music, study evolution, study 'humanist' philosophy, partake in sexually oriented teaching programs, openly discuss personal and family matters, and receive the advice of secular guidance counselors." Davis v. Page, 385 F. Supp. 395, 397 (D.N.H. 1974) (footnotes omitted).

moderate in this practice; they oppose subjection to views biased against their beliefs, but permit participation in a balanced presentation of both antagonistic and supportive teachings in a nonreligious forum, such as a public school classroom.[44] Many other faiths are not explicitly separatists, yet would presumably protest beyond a point against submission to particularly hostile views.

The courts have recognized that separatist practices fall within free exercise protection. The Ohio Supreme Court, for instance, recently invalidated an educational standards law that burdened a sectarian school's exercise of separatist religious tenets.[45] The courts also have recognized that school curricula antagonistic to religious convictions can violate exercise of separatist practices. In *Yoder* the Supreme Court implicitly acknowledged that public schools abridged separatist practices integral to the Amish way of life. The Old Order Amish faith requires separation of the absolute type,[46] and compulsory education after eighth grade exposed Amish students both to an environment antagonistic to their values and to teachings contrary to their doctrines.[47]

c. *Compulsion of Unconscionable Declarations of Belief*

Compulsion of declarations of belief contrary to the religious convictions held by public school students may burden free exercise of

44. Typical of this more common practice of separatism is the Baptist Bible Fellowship. The "Fellowship believes in separation. Its churches and members literally follow commands in the Bible such as 'be ye separate (from unbelief), saith the Lord' . . . ; 'have no fellowship with the unfruitful works of darkness' . . . ; and avoid 'oppositions of science falsely so called.'" While "in religious matters the Baptist Bible Fellowship believes in total separation from unbelief in any form, in secular matters it believes in separation from many activities and teachings" but also "recognizes that Christians must be in the world though not of it." Letter from Dr. R. Herbert Fitzpatrick, Trustee of Baptist Bible College (Sept. 27, 1977) (on file with *Yale Law Journal*).

45. State v. Whisner, 47 Ohio St. 2d 181, 351 N.E.2d 750 (1976). The minimum standards law "infringe[d] upon the rights of these appellants, consistent with their religious beliefs, to engage in complete, or nearly complete, separation from community affairs" through avoiding conformity to the world's values and beliefs. *Id.* at 209-10, 351 N.E.2d at 767. Practice of "separation from worldliness" impelled the appellants to center education around Bible study. *Id.* at 188, 199, 351 N.E.2d at 755, 761. The challenged state statute interfered with this practice through allocation of most of the school day to secular subjects. *Id.* at 205, 210, 351 N.E.2d at 765-66, 771.

46. The Court noted strict Amish adherence to biblical injunctions such as "be not conformed to this world." Wisconsin v. Yoder, 406 U.S. 205, 216 (1972). "Separation from the world is a basic tenet of the Amish charter . . . ." J. HOSTETLER, AMISH SOCIETY 51 (rev. ed. 1968). *See id.* at 48, 49.

47. 406 U.S. at 218 ("The conclusion is inescapable that secondary schooling, by *exposing* Amish children to worldly influences in terms of attitudes, goals, and values contrary to beliefs, and by substantially interfering with the religious development of the Amish child and his integration into the way of life . . . contravenes the basic religious tenets and practice of the Amish faith . . . .") (emphasis added); *id.* at 211.

religion by causing subordination of those convictions. In *West Virginia State Board of Education v. Barnette*,[48] the Supreme Court ruled that the First Amendment protects individuals from state-compelled statements contrary to religious principles.[49] The religion of the students in that case forbade reciting the pledge of allegiance and saluting the flag.[50] The required declaration abridged the First Amendment rights of the students, not because it was an oath[51] or because it was religious in nature,[52] but because it offended the complainants' religious convictions.[53]

2. *Coercion against Free Exercise in Public Schools*

For any of the above restraints on religious liberty to be substantial, and hence to contribute to an abridgment of free exercise, coercion against free exercise must be exerted.[54] This pressure can take two basic forms: the state might force an individual to choose between subordinating a religious exercise and suffering a penalty or to choose

48. 319 U.S. 624 (1943).

49. *Id.* at 633-34 ("[T]he compulsory flag salute and pledge requires affirmation of a belief and an attitude of mind. . . . To sustain the compulsory flag salute we are required to say that a Bill of Rights which guards the individual's right to speak his own mind, left it open to public authorities to compel him to utter what is not in his mind."); *see* Wooley v. Maynard, 430 U.S. 705, 714, 715 (1977) (First Amendment safeguards individual's "right to refrain from speaking" an "ideological point of view he finds unacceptable" on religious grounds). Both cases were decided under "the sphere of intellect and spirit which it is the purpose of the First Amendment to our Constitution to reserve from all official control" rather than specifically under the free exercise clause. 319 U.S. at 642; 430 U.S. at 715. This general ideological sphere, however, appears to embrace not only freedom of speech but also freedom of religion and freedom of press. Moreover, the claims in the complaints under the free exercise clause indicate that the Court's reasoning would apply to the religion area as well as the speech context. *Compare* Barnette v. West Va. State Bd. of Educ., 47 F. Supp 251, 253 (S.D.W. Va. 1942), *aff'd*, 319 U.S 624 (1943) *with* Wisconsin v. Yoder, 406 U.S. 205, 244 (Douglas, J., dissenting in part) *and* West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 646 (Murphy, J., concurring).

50. The Jehovah's Witness religion perceives the pledge and salute to be worship of a graven image. 319 U.S. at 629.

51. The Court spoke of forcing an individual to declare, communicate, affirm, utter, profess, or confess, and not of compelling him to swear or make an oath. 319 U.S. at 631, 633, 634, 642. Displaying a state motto clearly does not involve an oath or legal affirmation, yet it abridged First Amendment rights because it forced the complainant to declare an objectionable ideological point of view. Wooley v. Maynard, 430 U.S. 705, 715 (1977).

52. The pledge of allegiance at that time did not contain the words "under God." *See* 319 U.S. at 628-29.

53. The Supreme Court has ruled that the state may not force an individual to profess belief or disbelief in any religion. Torcaso v. Watkins, 367 U.S. 488, 495 (1961); Everson v. Board of Educ., 330 U.S. 1, 15 (1947). In *Torcaso* the Court overturned a law requiring an oath of belief in God as a qualification for state office, because the oath compelled an atheist to profess a belief contrary to his convictions. 367 U.S. at 495. *See* Sherbert v. Verner, 374 U.S. 398, 402 (1963); Abington School Dist. v. Schempp, 374 U.S. 203, 288-89 (1963) (Brennan, J., concurring).

54. Wisconsin v. Yoder, 406 U.S. 205, 235 (1972); Board of Educ. v. Allen, 392 U.S. 236, 248-49 (1968).

between forsaking such an exercise and forgoing a public benefit. Government need not impose the choice directly upon a named religion, but instead may require or prohibit something contrary to the exercise of that religion.[55] Students at the secondary and elementary levels are especially susceptible to such pressures and to religious doubt, because they do not weigh classroom instruction analytically[56] and do not approach religious issues abstractly.[57]

Courts on two occasions have determined that exclusive instruction in the general theory does not yield coercion against religious exercise, and so have dismissed challenges under the free exercise clause without trial. In *Willoughby v. Stever*[58] the plaintiff did "not allege any coercion directed at the practice or exercise of his beliefs,"[59] and in

55. *See* Sherbert v. Verner, 374 U.S. 398, 404 (1963).

56. Marek & Renner, *Operational Thinking and the Tenth-Grade Student*, SCI. TCHR., Sept. 1972, at 32 ("73 percent of the tenth-graders interviewed cannot do formal operational thinking," *i.e.*, critical or analytical thinking, as in biology course) (high school sophomores).

57. *E.g.*, R. GOLDMAN, RELIGIOUS THINKING FROM CHILDHOOD TO ADOLESCENCE 239 (1964) (conceptual thought about religious questions does not reach full development during adolescence); K. HYDE, RELIGIOUS LEARNING IN ADOLESCENCE 104 (1965) ("[T]he growth of a critical attitude in adolescence . . . inhibits the growth of true religious attitude and of mature religious beliefs."); A. VERGOTE, THE RELIGIOUS MAN: A PSYCHOLOGICAL STUDY OF RELIGIOUS ATTITUDES 297, 298 (M. Said trans. 1969) ("[A]dolescence is the age of doubts about faith" since an individual then must "make his own critical synthesis of life," which "leads him to reconsider his religious convictions.") Hence public school instruction contrary to religious values can cause prejudice against religion. *E.g.*, R. GOLDMAN, *supra* at 242 ("many adolescents jettison their theological framework as childish . . . because it cannot apparently be reconciled with science"); E. HURLOCK, CHILD DEVELOPMENT 357, 360 (1942) (one major cause of "adolescent doubt" and "discarding of . . . beliefs" is "the disturbing influence that comes from the *study of science*" that contradicts religious beliefs (emphasis in original)); K. HYDE, *supra* at 92 ("[C]ritical powers may be emotionally orientated against religious beliefs, while the assertions of a popular humanism, with its mechanical explanation of life and its rejection of the spiritual, is uncritically accepted. Thus a prejudice against religion becomes firmly established while religious ideas remain confused and inadequate.")

58. No. 1574-72 (D.D.C. May 18, 1973), *aff'd mem.*, 504 F.2d 271 (D.C. Cir. 1974), *cert. denied*, 420 U.S. 927 (1975).

59. Memorandum and Order at 6, *id.* (D.D.C. Aug. 25, 1972) (denying request for three-judge court). Since apparently neither the plaintiff nor his child was exposed to instruction in the general theory, the only pressure alleged was being "coerced to pay taxes to support anti-religious acts which run contrary to his belief that man was created by God." *Id. See* Respondents' Memorandum for Certiorari at 3-4, Willoughby v. Stever, 420 U.S. 927 (1975). This did not involve sufficient coercion to support a free exercise claim. *Cf.* Williams v. Board of Educ., 388 F. Supp. 93, 94, 96 (S.D.W. Va.), *aff'd mem.*, 530 F.2d 972 (4th Cir. 1975) (public school textbooks cause no "inhibition on or prohibition of the free exercise of religion" by private school student).

In *Willoughby* the plaintiff challenged federal funding of the National Science Foundation, which in part finances textbook writing for secondary schools by the Biological Sciences Curriculum Study. The suit was brought primarily under the establishment clause. *See* Petition for Certiorari at 7, Willoughby v. Stever, 420 U.S. 927 (1975). The district court refused to permit discovery and declined to hold a trial on the merits; it dismissed the suit without opinion for lack of a substantial constitutional question. Petition for Certiorari at 4, *id.*

Wright v. Houston Independent School District[60] "the offending material [was] peripheral to the matter of religion" and required " 'obtuse reasoning to inject any issue of the "free exercise" of religion.' "[61] These decisions, however, failed to recognize the coercion against religious exercise that arises in public schools from prescribed courses, conditioned benefits, teacher influence, and peer group persuasion, or the susceptibility of students to these pressures against religious imperatives.

a. *Compulsion through Course Prescription*

Public schools may impose coercion at several levels. Students are required to attend classes and may be required to study particular subjects. If course material contradicts the religious convictions of some students, prescription of the course threatens to undermine their beliefs. If their religion forbids exposure to predominantly contrary teachings, prescription also causes violation of religious practices. This would impose a choice between abandoning free exercise or suffering the penalty for not fulfilling a prerequisite for graduation and not attending a required course.

b. *Penalization by Unconstitutional Condition*

Even where courses are not prescribed and attendance is not compelled, a condition on valuable instruction may produce pressure

60. 366 F. Supp. 1208 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974).

61. 366 F. Supp. at 1211, 1212 (quoting Zorach v. Clauson, 343 U.S. 306, 311 (1952)). The district court in *Wright* responded to two free exercise arguments. First, there "has been no suggestion that Plaintiffs, or any other students, have been denied the opportunity to challenge their teachers' presentation of the Darwinian theory." 366 F. Supp. at 1210. The opportunity to respond, however, would not avert undermining of creationist convictions in impressionable students, probably would not counter violation of separatist practices from classroom instruction still antagonistic to religious exercise, and would not necessarily render declarations on tests unnecessary. This "opportunity," moreover, does not consider the substantial pressures from teachers and students against nonconforming beliefs, particularly when those convictions must be stated publicly. Second, the plaintiffs asserted that a request for exemption from class "compels a student 'to profess a belief' in a religion." 366 F. Supp. at 1212. Although exemption ordinarily requires a request, the request itself is not a declaration of belief or disbelief of the sort involved in *Barnette* and *Torcaso*, so the district court properly distinguished those cases from a request for exemption from a biology classroom or a decision of nonparticipation in a released-time program (as in *Zorach*). *Id.*

In *Wright* the plaintiffs challenged public school instruction in evolution, a "doctrine that is religious in nature under the guise of scientific theory," primarily under the establishment clause. Plaintiff's Memorandum in Opposition to Defendant's Motions at 1, Wright v. Houston Independent School Dist., 366 F. Supp. 1208 (S.D. Tex. 1972). The district court quashed the taking of depositions intended to provide proof of contrariety and coercive impact. 366 F. Supp. at 1208 n.1; Petition for Certiorari at 7-8, 10, 46, Brown v. Houston Independent School Dist., 417 U.S. 969 (1974). The court then dismissed the suit for failure to state a substantial federal claim. 366 F. Supp. at 1212, 1213. Neither *Wright* nor *Willoughby* involved a trial on the merits of the questions involved.

against religious exercises. The unconstitutional condition doctrine prohibits government from imposing a choice between enjoyment of an important public benefit or privilege and assertion of fundamental constitutional rights.[62] Such a choice necessarily produces coercion against exercise of that right,[63] whether it is enjoyment of religious freedom,[64] exercise of free speech,[65] or another basic constitutional right.[66]

A condition must meet several tests to be declared an unconstitutional violation of religious freedom. First, a particular course of action must burden free exercise of religion.[67] Second, the free exercise clause must bar government from directly requiring that course of

62. Comment, *Another Look at Unconstitutional Conditions*, 117 U. PA. L. REV. 144, 144 (1968) (government "may not grant the benefit or privilege on conditions requiring the recipient in some manner to relinquish his constitutional rights," nor can it "withhold or cancel the benefit as a price for the assertion of such rights" (footnote omitted)). *See* Sherbert v. Verner, 374 U.S. 398, 410 (1963); Frost & Frost Trucking Co. v. R.R. Comm'n, 271 U.S. 583, 593 (1926).

The state may not condition receipt of a public benefit upon subordination of free exercise rights or penalize the exercise of religious freedom by relinquishment of a public benefit. For example, in Sherbert v. Verner, 374 U.S. 398 (1963), the Supreme Court held that the state may not condition receipt of unemployment compensation benefits on subordination of sabbatarian (Saturday worship) convictions. *Id.* at 406. An eligibility rule for welfare required acceptance of any available employment, *id.* at 400-01, including jobs involving Saturday work, and Mrs. Sherbert's religion forbade labor on that day. *Id.* at 399. Consequently the government "force[d] her to choose between following the precepts of her religion and forfeiting benefits, on the one hand, and abandoning one of the precepts of her religion in order to accept work, on the other hand." *Id.* at 404. The Court thus deemed this to be an unconstitutional choice.

63. *E.g.*, Comment, *supra* note 62, at 158 (state "encourag[es] him to forego exercise of his rights" and creates "strong pressure to accept the benefit"); Note, *Unconstitutional Conditions*, 73 HARV. L. REV. 1595, 1599 (1960) ("Denying a benefit because of the exercise of a right in effect penalizes that exercise . . . .")

64. In *Sherbert* the choice pressured the individual to forgo a religious practice, penalized free exercise of her religion, and constrained her to abandon a religious conviction. 374 U.S. at 404, 406, 410. In Torcaso v. Watkins, 367 U.S. 488 (1961), a choice between a declaration of belief contrary to religious convictions and enjoyment of public office unconstitutionally forced a job applicant to profess belief contrary to his religious convictions. *Id.* at 495.

65. *See, e.g.*, Speiser v. Randall, 357 U.S. 513, 526 (1958) (choice between tax exemption and loyalty oath causes "deterrence of speech"); American Communications Ass'n v. Douds, 339 U.S. 382, 402 (1950) ("Under some circumstances, indirect 'discouragements' undoubtedly have the same coercive effect upon the exercise of First Amendment rights as imprisonment, fines, injunctions or taxes.")

66. *See, e.g.*, United States v. Jackson, 390 U.S. 570, 581 (1968) (making death penalty possible in jury trial but not in nonjury trial inevitably acts "to discourage assertion of the Fifth Amendment right not to plead guilty and to deter exercise of the Sixth Amendment right to demand a jury trial"); Spevack v. Klein, 385 U.S. 511, 516 (1967) ("The threat of disbarment and the loss of professional standing, professional reputation, and of livelihood are powerful forms of compulsion to make a lawyer relinquish the privilege" against self-incrimination.)

67. The Court in *Sherbert* found that "the disqualification for benefits impose[d] [a] burden on the free exercise of appellant's religion." 374 U.S. at 403.

action.[68] Third, the state must have imposed a choice between the protected religious exercise and a public benefit.[69] Finally, imposition of the choice, whether through a specific provision that disqualifies adherents to the religion or through a condition that offends exercise of their religion,[70] must be effectively the same as requiring the unconscionable course of action.[71]

A choice between deprivation of valuable instruction in public schools and subordination of religious objections against curriculum may produce coercion against free exercise.[72] Public education is a

68. In *Sherbert* the state could not directly require Saturday work. *Id.* ("no conduct prompted by religious principles of a kind within the reach of state legislation"). *See* United States v. Jackson, 390 U.S. 570, 583 (1968) (federal government cannot deny right to jury trial in a criminal case, so it cannot impose condition penalizing assertion of that right); Speiser v. Randall, 357 U.S. 513, 526 (1958) (imposition of choice between tax exemption and freedom of speech "produce[d] a result which the State could not command directly").

69. The Court in *Sherbert* noted that "forc[ing] her to choose between following . . . her religion and forfeiting benefits" constituted "[g]overnmental imposition" of an unconstitutional condition. 374 U.S. at 404.

70. For example, the choice involved in *Sherbert* was unconstitutional even though the sabbatarian tenets of Mrs. Sherbert rather than a state disqualification of Seventh-day Adventists forced her to surrender the benefit in order to assert free exercise rights. *See* 374 U.S. at 404 (Mrs. Sherbert's "ineligibility for benefits derive[d] solely from the practice of her religion," yet choice was imposed by government). The dissent in that case argued that the claimant "was denied benefits just as any other claimant would be denied benefits who was not 'available for work' for personal reasons." *Id.* at 420 (Harlan, J., dissenting) (footnote omitted). Because it was irrelevant that "these personal considerations sprang from her religious convictions," the state did not "discriminat[e] against the appellant on the basis of her religious beliefs." *Id.* This nonetheless would burden the free exercise of the objecting individual but not that of others. Although the government might argue that "the condition or 'burden' applies to all recipients," actually "everyone is not being offered the same [benefit-burden] package, since the condition serves as a significant restriction on the activities only of those who presently desire to exercise the right required to be waived as the condition to receipt of the benefit." Note, *supra* note 63, at 1600. The unconstitutional condition doctrine prevents the state from accomplishing indirectly what it cannot do directly. Western Union Tel. Co. v. Foster, 247 U.S. 105, 114 (1918).

71. In *Sherbert* creation of the choice placed "the same kind of burden upon the free exercise of religion as would a fine imposed against appellant for her Saturday worship." 374 U.S. at 404. *See* American Communications Ass'n v. Douds, 339 U.S. 382, 402 (1950) (dictum); Comment, *supra* note 62, at 152.

72. Where an individual does not *want* a public benefit, or where the Constitution *requires* the condition, as was the case with the Amish in *Yoder*, the situation differs. First, the benefit is not withheld as the result of the condition, because the individual does not desire what the government offers, and so the choice between the benefit and religious exercise does not penalize the individual's free exercise. Second, imposition of the choice is not tantamount to requiring an objectionable course of action, because it does not have any coercive effect on the individual. Finally, the establishment clause compels the sort of "condition" implicated in *Yoder*. Even if an individual's religious convictions required him to study doctrine in school and thus prevented him from enjoying public education, the Constitution would prohibit public school instruction in religious dogma and hence would directly impose a "constitutional condition."

public benefit,[73] whether or not attendance is compelled,[74] and an academically significant course also is a public benefit, whether it is prescribed or elective.[75] Undermining a student's religious beliefs, violating his separatist religious activities, or compelling his declaration of objectionable beliefs would burden free exercise of that individual's religion, and the state could not directly require these changes in the student's belief and conduct. Incorporating instruction contrary to his religious faith into the curriculum may impose a choice between instructional material and religious exercise, and a choice involving educationally important material such as biology[76] may be tantamount to a direct requirement of subjection to objectionable instruction and abandonment of religious precepts. Imposition of a choice between subordination of religious imperatives and surrender of valuable instruction, moreover, may coerce an individual to enroll in a course despite violation of religious exercise.

73. In Goss v. Lopez, 419 U.S. 565, 576 (1975), the Court treated education in a public secondary school as a public benefit and sustained a due process challenge. *Accord,* Dixon v. Alabama Bd. of Educ., 294 F.2d 150, 156 (5th Cir.), *cert. denied,* 368 U.S. 930 (1961); Knight v. State Bd. of Educ., 200 F. Supp. 174, 178 (M.D. Tenn. 1961). In Dickey v. Alabama State Bd. of Educ., 273 F. Supp. 613, 618 (M.D. Ala. 1967), the district court treated education at a state university as a public benefit and upheld a First Amendment complaint.

74. The Supreme Court ruled in Torcaso v. Watkins, 367 U.S. 488 (1961), that government may not require surrender of the opportunity of holding public office for exercise of religious convictions against professing belief in God. The state did not force Mr. Torcaso to pursue public office, but by condition (the oath) it denied him a benefit (opportunity for government employment). "The fact . . . that a person is not compelled to hold public office cannot possibly be an excuse for barring him from office by state-imposed criteria forbidden by the Constitution." *Id.* at 495-96. Government similarly did not force Mrs. Sherbert to seek unemployment compensation.

A state college imposed an unconstitutional condition when it forced a choice between receipt of a public college education and enjoyment of constitutional rights to due process, although no statute compelled attendance at the college. Dixon v. Alabama Bd. of Educ., 294 F.2d 150, 156, 157 (5th Cir.), *cert. denied,* 368 U.S. 930 (1961). Hence compulsion to seek the public benefit, such as through compulsory school attendance laws, is irrelevant to existence of an unconstitutional condition.

75. A federal court of appeals has ruled that a secondary school may not condition enjoyment of specific public school courses on relinquishment of free exercise of religion. Spence v. Bailey, 465 F.2d 797 (6th Cir. 1972). In *Spence* a student's religious convictions opposed participation in Reserve Officers' Training Corps, and the public school system effectively conditioned the liberal arts courses that were educationally important to him on enrollment in ROTC. *Id.* at 798. The student was not required to take those particular courses in order to receive a diploma from the public school system. *Id.* The court labeled this an unconstitutional choice and compared it to the unconstitutional condition in *Sherbert. Id.* at 799, 800.

76. *See, e.g.,* Sears, *The Importance of Biology Teaching For Secondary School Pupils,* 38 AM. BIOLOGY TCHR. 14 (1976), *reprinted from* 1 AM. BIOLOGY TCHR. 67 (1939). Biology occupies a significant place in the secondary school curricula, virtually always lasting a full year. L. OSTERNDORF & P. HORN, COURSE OFFERINGS, ENROLLMENTS, AND CURRICULUM PRACTICES IN PUBLIC SECONDARY SCHOOLS 1972-73, at 157 (NCES 77-153, 1976).

c. *Influence and Pressure from Teachers and Peers*

Other forms of coercion against free exercise may arise from interactions within the classroom. Teachers in public secondary and elementary schools can exert influence contrary to students' religious tenets. This persuasive effect arises from the position of authority, superiority in education, and difference in age of instructors.[77] This teacher influence has effect especially on vulnerable values such as religious convictions[78] and in technical subjects such as science.[79] Further, the instructor's authority over grades and class discussion includes the ability to count discrepant responses "wrong" and thereby to penalize disagreement with the classroom presentation.[80] The result is that students may alter personal beliefs when they conflict with classroom instruction.[81]

Peers in public schools also can exert pressure against religious exercise by students. The peer group occupies a vital place in the life of a student in secondary or elementary school.[82] Conformity to behavior and beliefs of fellow students is a strong drive of pupils at those levels of maturity.[83] The individual's need for group acceptance and social

77. Instructors influence pupils' performance and aspirations for similar reasons. *See* A. ZANDER, T. CURTIS & H. ROSENFELD, THE INFLUENCE OF TEACHERS AND PEERS ON ASPIRATIONS OF YOUTH 25, 78-79 (U.S. Office of Educ. 1961) (high school sophomores and seniors); 34 DISSERTATION ABSTRACTS 1732A (1973) (abstracting J. Van Alst, The Effects of Influenced Teacher and Student Expectations on Student Performance in Tenth Grade Science (1973) (unpublished dissertation for Boston University)) (high school sophomores in biology course); *cf.* Zorach v. Clauson, 343 U.S. 306, 311 (1952) (instructor's use of position and authority to persuade students in religious matters would be "coercion" prohibited by free exercise clause).

78. *E.g.*, Brown & Pallant, *Religious Belief and Social Pressure*, 10 PSYCH. REP. 813, 814 (1962) ("Positive pressure produced a significant change in stated beliefs towards an 'expert's' opinion, showing that religious beliefs are susceptible to social influences.") (high school-aged individuals). *See* notes 56 & 57 *supra*.

79. Patel & Gordon, *Some Personal and Situational Determinants of Yielding to Influence*, 61 J. ABNORMAL & SOC. PSYCH. 411, 414, 417 (1960) (prestige of source governs suggestibility in high school students); Stone & James, *Interval Scaling of the Prestige of Selected Secondary Education Teacher-Specialties*, 20 PERCEPTUAL & MOTOR SKILLS 859, 860 (1965) (science teachers possess particularly high prestige).

80. *See, e.g.*, Battle, *Relation between Personal Values and Scholastic Achievement*, J. EXPERIMENTAL EDUC., Sept. 1957, at 27; 33 DISSERTATION ABSTRACTS 5825A, 5825A-26A (1973) (abstracting D. Bartlett, Teacher Perception and Labeling of Discrepant Behavior (1972) (unpublished dissertation for Peabody College)); Thompson, *High School Students and Their Values*, 16 CAL. J. EDUC. RESEARCH 217, 219 (1965).

81. Sereno, *Ego-Involvement, High Source Credibility, and Response to a Belief-Discrepant Communication*, 35 SPEECH MONOGRAPHS 476 (1968) (attitude change results from belief-discrepant situation created by high-credibility source) (college students); *see* R. BERENDA, THE INFLUENCE OF THE GROUP ON THE JUDGMENTS OF CHILDREN 49 (1950) (students aware of teacher's opinion in classroom, even if obviously wrong, will limit range of their views and conform their beliefs more to that opinion) (elementary school students).

82. *See* note 99 *infra*.

83. *E.g.*, Wisconsin v. Yoder, 406 U.S. 205, 211 (1972) ("Formal high school education beyond the eighth grade . . . places Amish children in an environment hostile to Amish

approval influences development of his values[84] and applies particularly to maintenance of his religious convictions.[85] If a student complies with peer pressure, he may forsake opinions, values, and practices that differ significantly from the student group's[86] and adopt principles that conform to those of fellow students,[87] even though that entails subordination or abandonment of his religious exercise.[88] If he does not conform to the peer group, fellow students may attempt to dissuade and influence him,[89] which normally causes change in opinion or practice.[90] If a student withstands the pressure, the peer group may

beliefs . . . with pressure to conform to the styles, manners, and ways of the peer group . . . ."); McCollum v. Board of Educ., 333 U.S. 203, 227 (1948) (Frankfurter, J., concurring) ("The law of imitation operates, and non-conformity is not an outstanding characteristic of children."); R. BERENDA, *supra* note 81, at 30 ("very strong need to remain a member of one's group" and "fear of being accused by the others of wanting to be 'different' ").

84. *E.g.*, E. HURLOCK, *supra* note 57, at 218 (elementary school-age individuals); Argyle, *Social Pressure in Public and Private Situations*, 54 J. ABNORMAL & SOC. PSYCH. 172, 174 (1957) ("norm formation is connected with the need for acceptance") (high school students).

85. Pressure from peers carries particular influence upon religious convictions, because "strong social support is required for the maintenance of a system of religious belief." Brown, *A Study of Religious Belief*, 53 BRIT. J. PSYCH. 259, 268 (1962).

86. *E.g.*, Asch, *Effects of Group Pressure upon the Modification and Distortion of Judgments*, in GROUP DYNAMICS RESEARCH AND THEORY 189, 191, 193, 194 (2d ed. D. Cartwright & A. Zander 1960) (some minority individuals come "to perceive the majority estimates as correct," others believe "that their perceptions are inaccurate," while others "suppress their observations" though aware of majority's error); Festinger, *A Theory of Social Comparison Processes*, 7 HUMAN REL. 117, 137 (1954) ("group has power to influence the member effectively and, in the case of opinion difference, . . . to eliminate the difference of opinion").

87. *E.g.*, R. BERENDA, *supra* note 81, at 32, 60 ("There is a statistically significant change in the judgments of the minority children in the direction of the group," even if it is plainly wrong, which reflects "a strong tendency to follow the majority."); Dashiell, *Experimental Studies of the Influence of Social Situations on the Behavior of Individual Human Adults*, in A HANDBOOK OF SOCIAL PSYCHOLOGY 1148 (C. Murchison ed. 1935) (individuals given information about majority student opinion shift to greater conformity) (high school students).

88. *E.g.*, C. HOVLAND, I. JANIS & H. KELLEY, COMMUNICATION AND PERSUASION: PSYCHOLOGICAL STUDIES OF OPINION CHANGE 159 (1953) (peer group norms disseminated in classroom influence students' religious opinions) (high school students); Kelley, *Salience of Membership and Resistance to Change of Group-Anchored Attitudes*, 8 HUMAN REL. 275, 288 (1955) (group can induce change in member's differing religious belief) (high school students); Lasseigne, *A Study of Peer and Adult Influence on Moral Beliefs of Adolescents*, 10 ADOLESCENCE 227, 229 (1975) (adolescents become "extremely vulnerable" to peer group influence in moral beliefs, and this influence "significantly" exceeds parent influence) (high school students).

89. *E.g.*, A. HARE, HANDBOOK OF SMALL GROUP RESEARCH 44 (1962) (group pressures deviant member and "will make overt attempts to secure the conformity of the deviant"); Festinger, Gerard, Hymovitch, Kelley & Raven, *The Influence Process in the Presence of Extreme Deviates*, 5 HUMAN REL. 327, 344, 345 (1952) (group seeks to obtain conformity) [hereinafter cited as *Influence Process*].

90. *E.g.*, Festinger, *supra* note 86, at 127 (group influence and pressure induces deviant "to change [his] own opinion to agree more with the others in the group"); *Influence Process*, *supra* note 89, at 344 (pressure toward uniformity in cohesive group increases change in deviant opinions).

reject him as a deviant and stigmatize him in various ways;[91] this can cause severe emotional effects when religious issues are involved.[92]

If expression or practice of religious convictions must occur in front of teachers and fellow students, restraint of free exercise is magnified. Such a requirement deters manifestation of nonconforming beliefs and conduct and causes declarations to be more conforming than private beliefs actually are.[93] It may induce a change in private convictions.[94] Requiring a student to make statements offensive to his religious convictions in front of the class and teacher, or to write declarations of belief on tests or essays for the instructor, would thus increase coercion against his religious rights.

The Supreme Court has implicitly recognized the coercive effect of the public school on religious exercise. The Court overturned a released-time program for religious instruction held within school classrooms in *McCollum v. Board of Education*,[95] while it sustained a similar program held away from school grounds in *Zorach v. Clauson*.[96]

91. *E.g.*, Abington School Dist. v. Schempp, 374 U.S. 203, 289-90 (1963) (Brennan, J., concurring) (objection to school program might cause students "to be stigmatized as . . . nonconformists"); Emerson, *Deviation and Rejection: An Experimental Replication*, 19 AM. SOC. REV. 688 (1954) (conforming group members reject deviants) (high school students); Rosenberg, *The Dissonant Religious Context and Emotional Disturbance*, 68 AM. J. SOC. 1, 4 (1962) (majority labels nonconformist in group inferior, "excluding the minority-group member from participation in activities, taunting him, hurling derogatory epithets at him, or using the abundant variety of instruments of cruelty") (high school students).

92. *E.g.*, E. HURLOCK, *supra* note 57, at 359 ("doubting religious doctrines is the source of much mental anguish and emotional distress on the part of the adolescent"); Rosenberg, *supra* note 91, at 2, 4, 5, 9 (individuals living in dissonant religious environment tend to develop "psychic or emotional disturbance," become "depressed," suffer a "sense of being 'different,' an absence of 'belongingness,'" have "low self-esteem" and "insecurity which stems from lack of integration in a group," and become tense and uncertain of their dignity).

93. *E.g.*, A. HARE, *supra* note 89, at 35 (an individual "is more apt to conform if his alternative is to go on record as a deviant in a group . . . whose influential members disagree with him," so "views expressed in public or with a possibility of being made public are more conforming" (emphasis omitted)); C. HOVLAND, I. JANIS & H. KELLEY, *supra* note 88, at 168 (openly expressed opinions tend to be more conforming than privately expressed opinions).

94. *E.g.*, A. HARE, *supra* note 89, at 36 ("[W]here pressure is exerted on a person to express an opinion different from the one he privately affirms, there is a tendency for him to change his overt opinion . . . ."); Argyle, *supra* note 84, at 174 (susceptibility to influence is larger when opinion must be stated in public rather than held privately).

95. 333 U.S. 203 (1948). In a "released-time" program participating students are released from classes during a specified period within the school day for religious instruction.

96. 343 U.S. 306 (1952). The program in *McCollum* was invalidated under the establishment clause, while that in *Zorach* was upheld over both establishment and free exercise objections. The Supreme Court in *Zorach* carefully distinguished the prior case; the released-time programs differed solely by the location of the instruction. "In the *McCollum* case the classrooms were used for religious instruction and the *force of the public school* was used to promote that instruction. Here, as we have said, the public schools do no more than accommodate their schedules to a program of outside religious

As the Court's distinction between these cases indicates, the public school classroom augments the persuasive force of instruction. This may cause enrollment in an ostensibly elective course over religious objections and may induce change in the religious convictions of a student.

The state has ultimate responsibility for this teacher influence and peer group pressure,[97] as it does for prescribed courses and unconstitutional conditions. It places a dissenting student in the situation where this coercion can be exerted against his religious exercises through compulsion of attendance.[98] This occurs at a maturity level at which individuals are highly susceptible to influence against religious imperatives. The government, moreover, establishes the curricula and builds certain subjects around material objectionable to some religions. It hires the teachers and delegates authority to them to present the subject, to discipline deviant students, to define "wrong" answers, and to

instruction." 343 U.S. at 315 (emphasis added). *Zorach* stressed the lack of coercion from a released-time program away from school grounds. *Id.* at 311. In a subsequent decision the Court emphasized the presence of coercion in the *McCollum* program in school classrooms: "this system had the effect of coercing the children to attend religious classes." McGowan v. Maryland, 366 U.S. 420, 452 (1961). *See* Abington School Dist. v. Schempp, 374 U.S. 203, 262 (1963) (Brennan, J., concurring). Although the Court in *McCollum* chose to rest the decision on establishment grounds, it used "the prop of 'free exercise' to give it support." Weclew, *The Establishment Clause and "Coercion,"* 47 MARQ. L. REV. 359, 360 (1963-64). And although in *Zorach* it rejected the challenge under the free exercise clause, the Court noted that "[i]f in fact coercion were used . . . a wholly different case would be presented." 343 U.S. at 311. Even without full development of the distinction, these cases implicitly recognize that the public school classroom carries substantial influence over student religious values.

97. The federal district court in Wright v. Houston Independent School Dist., 366 F. Supp. 1208 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974), questioned whether exclusive instruction in the general theory of evolution involves state action.

> Defendants, however, are not acting pursuant either to State law or school district regulation. Plaintiffs have not alleged that there exists even a school district policy regarding the theory of evolution. All that can be said is that certain textbooks selected by school officials present what Plaintiffs deem a biased view in support of the theory.

366 F. Supp. at 1210. The court termed this "so nebulous an intrusion upon the principle of religious neutrality" as not to present a substantial constitutional question. *Id.* Had there been a trial on the merits, however, the plaintiffs might have shown that Texas had a compulsory attendance law and selected biology textbooks that school districts must use, all of which exclusively presented the general theory, and that the school districts hired teachers who designed classroom instruction. TEX. EDUC. CODE ANN. tit. 2, §§ 21.032, 12.11(e), 12.13, 12.15(b), 12.16(c), 13.101 (Vernon 1972). These state actions initiate the instruction and classroom requirements that restrain free exercise, thus creating the situation in which a coercive burden arises.

98. Schempp v. Abington School Dist., 177 F. Supp. 398, 406 (E.D. Pa. 1959), *vacated and remanded*, 364 U.S. 298 (1960) ("This mandatory requirement of school attendance puts the children in the path of the compulsion."); K. ALEXANDER & K. JORDAN, LEGAL ASPECTS OF EDUCATIONAL CHOICE: COMPULSORY ATTENDANCE AND STUDENT ASSIGNMENT 12, 60 (1973) (every state but one has compulsory attendance requirement).

dispense grades. The state also creates the school peer group by compelling the attendance of other individuals, and elevates it to prime importance in a minority student's life by extending school hours over so large a part of the day.[99]

3. *Assessment of the Burden from Exclusive Presentation of the General Theory*

The impact on religious liberty described above is not merely theoretical; it poses a real and substantial threat to free exercise.[100] Nearly all secondary school students enroll in at least a first-year biology course.[101] Most biology courses in public schools exclusively present the general theory of evolution, because textbooks ordinarily teach only that theory[102] and the treatment in the text generally governs the classroom presentation.[103] Moreover, the general theory

99. Compulsory education produces a peer group that occupies a place of tremendous importance in the life of a student, and gives a disproportionate impact to pressures from fellow pupils.

> This setting-apart of our children in schools—which take on ever more functions, ever more "extracurricular activities"—for an ever longer period of training has a singular impact on the child of high-school age. He is "cut off" from the rest of society, forced inward toward his own age group, made to carry out his whole social life with others his own age. With his fellows, he comes to constitute a small society, one that has most of its important interactions *within* itself, and maintains only a few threads of connection with the outside adult society.

J. COLEMAN, THE ADOLESCENT SOCIETY 3 (1961) (high school students) (emphasis in original).

100. *See* Shelton v. Tucker, 364 U.S. 479, 487 (1960) ("The vigilant protection of constitutional freedoms is nowhere more vital than in the community of American schools.")

101. In American public secondary schools 92.8% of tenth-grade students enroll, have enrolled, or will enroll in a first-year biology course. L. OSTERNDORF & P. HORN, *supra* note 76, at 15, 54. The few secondary schools that do not offer any biology courses account for part of the remaining 7.2%. Moreover, the trend is toward universal study of this subject. *Id.* at 15; L. OSTERNDORF, SUMMARY OF OFFERINGS AND ENROLLMENTS IN PUBLIC SECONDARY SCHOOLS, 1972-73, at 3, 18 (NCES 76-150, 1975).

Several factors appear to underlie this nearly universal enrollment. Prescription of the course by the legislature, school district, or individual school causes many students to take a biology course. For example, West Virginia requires a year of biology study for all public school students. State Sup't of Schools, Secondary Schools: Standards for Classification 20 (1976-77). The importance of the benefit of biology instruction to career plans, college preparation, or general education induces many other students to enroll. *See* note 76 *supra*. Pressure from instructors and peers to conform with prevailing beliefs and the normal course pattern and to subordinate religious qualms influences some students to enter a biology course. Whatever the specific reasons, most American high school students do study biology.

102. The major high school biology textbooks, listed at note 25 *supra*, give great emphasis to the general theory of evolution. *Compare* notes 26-30 *supra with* note 104 *infra*. They do not present any model of creation.

103. Kastrinos, *Survey of the Teaching of Biology in Secondary Schools*, 98 SCH. & SOC'Y 241, 242 (1970); Kastrinos & Voss, *Influence of the Textbook on Topics Remembered by Students Who Took College Boards in Biology*, 32 AM. BIOLOGY TCHR. 227, 233 (1970).

permeates substantial portions of the biology texts in greatest use.[104] Such exclusive and pervasive presentation of the general theory makes it irrelevant, for purposes of assessing interference with free exercise, whether that scientific model is labeled "the fact" or "the theory" or "one theory."[105]

Exclusive public school instruction in the general theory burdens free exercise.[106] It can undermine religious belief in creation and can inculcate a contrary belief.[107] It can violate separatist practices of

104. The teachers' guidebook designed primarily for BSCS biology textbooks states that "[b]ecause of its *pervasive and comprehensive character,* evolution is treated in three different ways in the BSCS materials. . . . [E]volution either as history or as process is *interwoven in all other chapters* where it has a place . . . ." E. KLINCKMANN, BIOLOGY TEACHERS' HANDBOOK 16 (2d ed. 1970) (emphasis added). The chairman of the board of directors of BSCS emphasizes that of the nine unifying themes of these texts, the general theory of "evolution is not only one of the major themes but is, in fact, central among the other themes; they are interrelated, and each is particularly related to evolution." Lee, *The BSCS Position on the Teaching of Biology,* BSCS NEWSLETTER, Nov. 1972, at 5. In *BSCS Blue* the general theory is "the most inclusive of the great unifying principles of biology." BSCS BLUE, *supra* note 25, at 105. In *BSCS Green* "[t]he entire course . . . can be regarded as a summary of the evidence for evolution," and in *BSCS Yellow* "[e]volution is another pervasive theme that is developed throughout the book." E. KLINCKMANN, *supra* at 68, 74. This interlacing of the general theory can be seen in notes 26-30 *supra.*

105. The textbook authors, in describing the general theory of evolution as "theory," signify something tantamount to fact. The widely used *Biology Teachers' Handbook* qualifies the meaning of that term:

> A special word is necessary concerning our habit of referring to the "theory of evolution." This usage is often taken to mean that evolution is but an envisaged possibility, something uncertain and unproved.
>
> This sense of "theory" no longer holds in science, if it ever did . . . . Evolution is a theory in this sense, yes—a body of interrelated *facts.* As new *facts* about evolution are discovered, the organization may be changed in order to include them, but this would not mean that the present organization of *facts* now known is unsound.

E. KLINCKMANN, *supra* note 104, at 16 (emphasis added; original emphasis omitted).

The effect of exclusive presentation of the general theory is to teach it as fact. A British professor, who is not a creationist, made this point in outlining a conversation with a biology student. In response to the tutor's request for " 'the evidence against the [general] theory of Evolution,' " the student would respond " '[b]ut there isn't any, sir.' " The student actually "would be behaving like certain of those religious students he affects to despise," by "taking on faith what he could not intellectually understand and . . . appeal[ing] to authority . . . of a 'good book' . . . *The Origin of Species.*" The professor would instruct him to "read the evidence for and against Evolution and present it as an essay." The student, "armed with an essay on the evidence for Evolution," would return to report that he " 'could not find anything in the scientific books against Evolution' " and that " 'there does not seem to be [a scientific argument against Evolution].' " The tutor "would . . . mention that he might have looked at the book by Radl, *The History of Biological Theories.*" G. KERKUT, *supra* note 2, at 4-5.

106. This section does not argue that restraint of free exercise results from *any* discussion of the general theory of evolution, but only from *exclusive* presentation of that view of origins.

107. Creationist convictions are especially vulnerable to influence at this educational stage. Several studies prove that belief in God as Creator and literal acceptance of the *Genesis* account of creation decline sharply as students reach 12-18 years of age, or the seventh through twelfth grades. K. HYDE, *supra* note 57, at 44 (citing authorities).

creationist religions.[108] Exclusive instruction also can compel unconscionable declarations of belief, because creationist individuals object to affirmation of the general theory for test questions or class discussion.[109] These restraints become substantial through operation of the various forms of coercion present in public schools.

It is true that subjection of all students to the general theory, regardless of their religious convictions, appears neutral. Governmental action, however, still may burden free exercise of religion, though it applies uniformly to all individuals and seems secular in nature. The Supreme Court has abandoned the "secular regulation" rule[110] that sustained general regulations dealing with nonreligious matters regardless of their contrariety to religious tenets or burden on religious exercise.[111] In *Yoder* it ruled that "[a] regulation neutral on its face may . . . nonetheless offend the constitutional requirement for governmental neutrality if it unduly burdens the free exercise of religion."[112] Public school instruction, then, is not immune from constitutional scrutiny merely because it appears nonreligious and applies generally.

108. For example, the Baptist Bible Fellowship both practices separation from predominantly hostile teachings, *see* note 44 *supra*, and affirms special creation of the world, living kinds, and man, *see* note 21 *supra*. This involves separation from exclusive presentation of the general theory, because the Fellowship believes that the "effect of a public school teaching only evolution is to indoctrinate students in that view and to destroy their belief in divine creation. Causing children to sit through only one explanation . . . might violate practice of separatism." The Fellowship, however, only "opposes indoctrination in evolution as the only theory" and "does not oppose all study of evolution." Letter from Dr. R. Herbert Fitzpatrick, Trustee of Baptist Bible College (Sept. 27, 1977) (on file with *Yale Law Journal*). Most creationist religions also are separatist. *See, e.g.*, WATCH TOWER BIBLE & TRACT SOCIETY, TRUE PEACE AND SECURITY 128, 131 (1973) (Jehovah's Witnesses); Roth, *Sanctity and Separation*, TRADITION, Fall 1974, at 29 (Orthodox Jews); Commission on Theology and Church Relations, Lutheran Church, Missouri Synod, Report: Theology of Fellowship 23 (undated).

109. This cannot be justified as requiring those students to state facts, because their very objection is that the general theory is not verifiable fact. *See* note 19 *supra* (contrariety defined by individual's religion). Nor can it be defended as not compelling them to change their private religious beliefs, because the First Amendment nonetheless proscribes requirement of declarations contrary to religious belief. *See* West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 633 (1943) ("It is not clear whether the regulation contemplates that pupils forego any contrary convictions of their own and become unwilling converts to the prescribed ceremony or . . . if they simulate assent by words without belief . . . .")

110. D. MANWARING, RENDER UNTO CAESAR 51 (1962) (emphasis omitted).

111. Galanter, *supra* note 18, at 231-55. The rule effectively was rejected in West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624 (1943). There, the compulsory flag pledge and salute, which appeared not to be a religious exercise and applied uniformly to all students, was found unconstitutional. The Supreme Court reversed its earlier decision in Minersville School Dist. v. Gobitis, 310 U.S. 586 (1940), which had sustained a similar requirement as a secular regulation, *id.* at 594-95.

112. 406 U.S. 205, 220 (1972). *Id.* (not sufficient justification that requirement "applies uniformly to all citizens of the State and does not, on its face, discriminate against religions or a particular religion, or that it is motivated by legitimate secular concerns"); *see* State v. Whisner, 47 Ohio St. 2d 181, 204, 351 N.E.2d 750, 764 (1976).

C. *Accommodation with the State Interest*

To determine whether a coercive burden on religious faith and practice constitutes an abridgment of free exercise, accommodation of the individual's religious liberty and the state's affected interest must be accomplished. Although courts have employed many approaches to accommodate these conflicting interests,[113] it is not sufficient for the government merely to show a "reasonable relation" between the challenged program and a valid state concern.[114] Nor is it adequate for a court simply to balance the free exercise right against the governmental interest.[115] Free exercise cases generally require a compelling state interest to override an individual's First Amendment claim.[116]

113. The Court employed a clear and present danger test in Cantwell v. Connecticut, 310 U.S. 296, 311 (1940); a balancing test in Schneider v. State, 308 U.S. 147, 162 (1939); a directness test in Braunfeld v. Brown, 366 U.S. 599, 605-07 (1961) (plurality opinion); and a compelling state interest test in Sherbert v. Verner, 374 U.S. 398, 406 (1963). These tests are summarized and evaluated in Comment, *The Religious Rights of the Incarcerated*, 125 U. PA. L. REV. 812, 837-56 (1977); *see* DuVal, *Free Communication of Ideas and the Quest for Truth: Toward a Teleological Approach to First Amendment Adjudication*, 41 GEO. WASH. L. REV. 161, 164-86 (1972).

114. Wisconsin v. Yoder, 406 U.S. 205, 233 (1972) (quoting Pierce v. Society of Sisters, 268 U.S. 510, 535 (1925)); Sherbert v. Verner, 374 U.S. 398, 406 (1963); West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 639 (1943). Religious exercise is a preferred freedom. Sherbert v. Verner, 374 U.S. 398, 407 (1963); Martin v. Struthers, 319 U.S. 141, 144-49 (1943); Murdock v. Pennsylvania, 319 U.S. 105, 115 (1943).

115. An ad hoc balancing test reduces a constitutional guarantee to a mere weight on the scales and requires judicial assessment of legislative matters and individual imponderables. The Court has observed in dictum that it is "inappropriate for this Court to label one [interest] as being more important or substantial than the other." United States v. Robel, 389 U.S. 258, 268 n.20 (1967). Professor Emerson has concluded that the test is unstructured and subjective: "[i]n the hands of most judges the balancing test comes to be nothing more than a way of rationalizing preformed conclusions." T. EMERSON, *supra* note 34, at 718. Ad hoc balancing has been soundly criticized. *E.g.*, DuVal, *supra* note 113, at 172-78; Frantz, *The First Amendment in the Balance*, 71 YALE L.J. 1424, 1441-45, 1449 (1962); Nimmer, *The Right to Speak from* Times *to* Time: *First Amendment Theory Applied to Libel and Misapplied to Privacy*, 56 CALIF. L. REV. 935, 939-41 (1968).

Weighing of personal interests, such as the centrality of an infringed exercise to the individual or his religion or the extent of infringement, reaches beyond the judiciary's constitutional domain and practical capabilities. Unitarian Church West v. McConnell, 337 F. Supp. 1252, 1257 (E.D. Wis. 1972), *vacated and remanded on other grounds*, 416 U.S. 932 (1974) ("The protection the Constitution extends to the exercise of religion does not turn on the theological importance of the disputed activity. Rather constitutional protection is triggered by the fact that it is religious."); *see* Serbian E. Orthodox Diocese v. Milivojevich, 426 U.S. 696, 709-10 (1976) (free exercise clause does not permit judicial assessment of questions of doctrine and church law); Presbyterian Church v. Hull Memorial Presbyterian Church, 393 U.S. 440, 449, 450 (1969) (same). A recent case, in which a federal district court balanced away free exercise rights, exemplifies the perils of the ad hoc approach. The court refused to excuse public school students from classrooms using audio-visual projections or teaching music and health, despite their sincere religious convictions against viewing audio-visuals, singing worldly music, or publicly discussing family relationships and sexual matters. The judge's mythical scales determined that the state's interest in education overbalanced the students' interest in free exercise. Davis v. Page, 385 F. Supp. 395, 399, 406 (D.N.H. 1974).

116. Comment, *supra* note 113, at 851. The compelling interest test requires determining which state interests are compelling and which are noncompelling, through

This means that the state, in order to justify a restraint on religious liberty, must have a compelling interest in the challenged program and must utilize the least burdensome means for achieving that interest.

1. *Compelling State Interest*

The Supreme Court explicitly adopted this test for free exercise cases in *Sherbert v. Verner*.[117] A state program could be sustained only if "any incidental burden on the free exercise of appellant's religion may be justified by a 'compelling state interest in the regulation of a subject within the State's constitutional power . . . .' "[118] Matters in which government has a compelling interest "have invariably posed some substantial threat to public safety, peace or order."[119] The Court followed this approach in *Yoder*,[120] though not without ambiguity, when it ruled that a governmental program must further "those interests of the highest order" to prevail.[121]

formulating "rules for differentiating between protected and unprotected [religious exercises]." It then requires applying the category to the case, so that if a governmental interest is compelling the state prevails and if the interest is noncompelling the state loses. DuVal, *supra* note 113, at 179. *See* Ely, *Flag Desecration: A Case Study in the Roles of Categorization and Balancing in First Amendment Analysis*, 88 HARV. L. REV. 1482 (1975) ("categorization"); Nimmer, *supra* note 115 ("definitional balancing"). This test differs from ad hoc balancing, because the first step yields a category that provides precedent for later cases, while the second step avoids balancing entirely. DuVal, *supra* note 113, at 179. The definitional balancing involved in the first step differs from the ad hoc process, moreover, because it weighs only the state interest and not also the individual religious interest. *See* note 115 *supra*.

117. 374 U.S. 398 (1963). In the freedom of speech area, the Court apparently employed the compelling state interest test in New York Times Co. v. Sullivan, 376 U.S. 254, 279 (1964); NAACP v. Button, 371 U.S. 415, 438 (1963); and Konigsberg v. State Bar, 366 U.S. 36, 50-51 (1961). *See* Marcus, *supra* note 34, at 1241; Nimmer, *supra* note 115, at 942-44.

118. 374 U.S. at 403 (quoting NAACP v. Button, 371 U.S. 415, 438 (1963)). The Court "consider[ed] whether some compelling state interest . . . justifies the substantial infringement of appellant's First Amendment right." *Id.* at 406.

In applying the compelling interest test, the number of individuals suffering restraint of religious freedom is irrelevant; the free exercise clause extends protection to the smallest minority as well as the largest religion. Clark, *Guidelines for the Free Exercise Clause*, 83 HARV. L. REV. 327, 333 (1969). In alleviating an abridgment of free exercise, however, this Note will argue that the actual and potential number of individuals affected is a factor relevant to the choice of remedy. *See* pp. 549-50 *infra*.

119. 374 U.S. at 403. *Accord*, Wisconsin v. Yoder, 406 U.S. 205, 230 (1972); West Va. State Bd. of Educ. v. Barnette, 319 U.S. 624, 639 (1943); P. KAUPER, *supra* note 18, at 23.

120. 406 U.S. 205 (1972).

121. 406 U.S. at 215. The rule resulting from *Sherbert* and *Yoder* is that if "the individual demonstrates that his actions . . . have been interfered with as a result of a state regulation, the state must demonstrate that it has a compelling interest . . . which could not be promoted by any less restrictive means. If the state makes that demonstration, it prevails . . . ; if not, it loses." Marcus, *supra* note 34, at 1242. The opinion in *Yoder* produced confusion by stating that a state program that interferes with religious liberty must have "a state interest of sufficient magnitude to override the interest claiming

Government clearly has an important interest in education.[122] An overly expansive definition of a governmental interest, however, could suppress individual rights, so a court should assess only the state interest in the challenged portion of a program.[123] The Supreme Court in *Yoder* considered the state's interest in compulsory attendance between eighth grade and age sixteen rather than its interest in education generally.[124] Similarly, in a challenge to public school curricula, a court should focus attention solely on the governmental interest in the questioned portion of the academic program.[125]

In a challenge to exclusive instruction in the general theory of evolution, the state has several interests at stake: educating its citizens, designing public school curricula, teaching biology, and presenting the general theory. The free exercise claim of creationists does not threaten the entire state interest in education or curricula, but only that in presenting and designing specific courses. Moreover, the challenge does not implicate the entire biology course, but only that part dealing with the origin of life. And it does not question all instruction in the general theory, but only exclusive instruction in that theory. In comparison with other governmental interests in education found to be compelling—such as vaccination of pupils,[126] assurance of teacher

protection under the Free Exercise Clause." 406 U.S. at 214. However, the Court's requirement that the state demonstrate an interest of "the highest order" and the citation to *Sherbert*, 406 U.S. at 215, make clear that the decision reaffirmed the compelling interest test. *See* State v. Whisner, 47 Ohio St. 2d 181, 217 n.17, 351 N.E.2d 750, 771 n.17 (1976) (citing *Yoder* and *Sherbert* as using compelling interest test). *Accord*, Wooley v. Maynard, 430 U.S. 705, 716 (1977) (employing compelling interest test).

122. Brown v. Board of Educ., 347 U.S. 483, 493 (1954); *see* Wisconsin v. Yoder, 406 U.S. 205, 213 (1972); Everson v. Board of Educ., 330 U.S. 1, 7 (1947). The courts have not established conclusively, however, that this important interest in education is a compelling interest. *Yoder* noted that because "only those interests of the highest order and those not otherwise served can overbalance . . . free exercise," the state interest in universal compulsory education "is by no means absolute to the exclusion or subordination of all other interests." 406 U.S. at 215. Hence the Court found the burden on free exercise unjustified by any compelling interest.

123. Frantz, *supra* note 115, at 1441. The judiciary, moreover, should consider only substantial evidence of interference with a school program from a free exercise challenge and not mere speculative threats. Sheldon v. Fannin, 221 F. Supp. 766, 775 (D. Ariz. 1963).

124. The Supreme Court assessed the governmental "interest in providing an additional one or two years of compulsory high school education," and found that "an additional one or two years of formal high school for Amish children . . . would do little to serve those [state] interests." 406 U.S. at 222, 224. *See* Sherbert v. Verner, 374 U.S. 398, 406 (1963) (state interest in welfare eligibility provision, not interest in unemployment compensation or in public welfare); State v. Yoder, 49 Wis. 2d 430, 438, 447, 182 N.W.2d 539, 542, 547 (1971), *aff'd sub nom.* Wisconsin v. Yoder, 406 U.S. 205 (1972) (state interest in two years of schooling, not interest in education generally).

125. *See* Note, *The Constitutionality Under the Religion Clauses of the First Amendment of Compulsory Sex Education in Public Schools*, 68 MICH. L. REV. 1050, 1056 (1970).

126. Jacobson v. Massachusetts, 197 U.S. 11, 27 (1905). In *Jacobson* the Court ruled vaccination of children to fall within a substantial state interest, 197 U.S. at 31-33, and

loyalty,[127] and nonencouragement of school segregation[128]—these concerns do not appear to be compelling interests.[129]

2. *Least Burdensome Means*

Even if a compelling interest underlies a governmental program, under *Sherbert* the program could be sustained only if "no alternative forms of regulation" would satisfy that state interest without burdening free exercise.[130] *Yoder* similarly required that restraints be justified by state "interests . . . not otherwise served."[131] This requirement does not demand merely that no less burdensome means further "the state's interest as much as it is furthered by the challenged means," but that no such alternatives "serv[e] the state's interest sufficiently."[132] The latter, the sufficiency approach to alternative means, provides greater protection for free exercise than the former, the efficiency approach. Where religious liberty is at stake, the state has the burden of disproving the sufficiency of less burdensome means.[133]

The state's interests in teaching biology and in presenting the general theory can be served by means less burdensome than exclusive presentation of that theory in public schools. For example, more than one nonreligious model of the origin of the world and life could be taught instead of just the general theory, or biology could be offered without any discussion of origins. In light of student impressionability,

subsequent decisions have read this to involve a compelling state interest. *E.g.*, Weidenfeller v. Kidulis, 380 F. Supp. 445, 450 & n.8 (E.D. Wis. 1974); *see* Sherbert v. Verner, 374 U.S. 398, 403 (1963).

127. Biklen v. Board of Educ., 333 F. Supp. 902, 909 (N.D.N.Y. 1971), *aff'd mem.*, 406 U.S. 951 (1972).

128. Green v. Connally, 330 F. Supp. 1150, 1167, *aff'd mem. sub nom.* Coit v. Green, 404 U.S. 997 (1971).

129. The state interest in a topic within a secondary school biology course appears similar to its interest in a high school ROTC course, and that is not a compelling interest. Spence v. Bailey, 465 F.2d 797, 799 (6th Cir. 1972). And it resembles the governmental interest in intrusive educational standards, which also is noncompelling. State v. Whisner, 47 Ohio St. 2d 181, 217-18, 351 N.E.2d 750, 771 (1976). *Cf.* Wooley v. Maynard, 430 U.S. 705, 717 (1977) ("[W]here the State's interest is to disseminate an ideology, no matter how acceptable to some, such interest cannot outweigh an individual's First Amendment right" and hence cannot be compelling.); Hirschoff, *Parents and the Public School Curriculum: Is There a Right To Have One's Child Excused from Objectionable Instruction?*, 50 S. CAL. L. REV. 871, 957 (1977) (only state interests in teaching basic reading, writing, arithmetic, and constitutional government are sufficiently substantial to overcome parental objections to curricula).

130. 374 U.S. at 407.

131. 406 U.S. at 215. *See* Martin v. City of Struthers, 319 U.S. 141, 147, 148-49 (1943); Cantwell v. Connecticut, 310 U.S. 296, 307 (1940); State v. Whisner, 47 Ohio St. 2d 181, 217, 351 N.E.2d 750, 771 (1976).

132. Comment, *supra* note 113, at 868. *See* Ely, *supra* note 116, at 1484-85.

133. Sherbert v. Verner, 374 U.S. at 407; Martin v. City of Struthers, 319 U.S. 141, 144-49 (1943); P. KAUPER, *supra* note 18, at 19-21.

classroom influence, and the conditioned educational benefit, any such alternative to exclusive instruction in the general theory appears to be considerably less burdensome.

Because no compelling state interest is present and less burdensome means are available, exclusive instruction in the general theory of evolution in public school classrooms abridges free exercise of religion. The following discussion describes several alternative methods for alleviation of this infringement and assesses their constitutional implications and their differing effects on state and individual interests.[134]

II. Remedies Available for Free Exercise Abridgment from Public School Instruction in the Origin of the World and Life

When a court determines that state action abridges free exercise of religion, it must fashion or order a suitable remedy to remove that unconstitutional burden. The least burdensome means test requires that the court consider the availability of alternatives to the state action and requires implementation of any sufficient alternatives. The greater strictures of the compelling state interest test, compared with prior free exercise standards, necessitate that the judiciary consider affirmative relief from infringements of religious liberty.[135] This more extensive relief, however, can produce tension between the free exercise and establishment clauses,[136] because it may appear to favor the burdened religious group over others and may harmonize with religious exercises despite nonreligious means. A careful construction of the scope of the establishment clause can mitigate much of this tension;[137] nevertheless,

134. When a challenged program lacks a compelling state interest, the government must remove the burden on free exercise, and not merely return the individual and state interests into balance, as the ad hoc balancing test would seem to permit. *See* United States v. Jackson, 390 U.S. 570 (1968) (freedom of speech); Comment, *supra* note 62, at 163.

135. *See* P. KAUPER, *supra* note 18, at 42-43. For example, courts applying a compelling interest test to free exercise claims often have required affirmative relief for prison inmates. *See, e.g.*, Barnett v. Rodgers, 410 F.2d 995 (D.C. Cir. 1969); Wilson v. Beame, 380 F. Supp. 1232 (E.D.N.Y. 1974).

136. Committee for Pub. Educ. v. Nyquist, 413 U.S. 756, 788 (1973) ("[T]ension inevitably exists between the Free Exercise and the Establishment Clauses . . . ."). For judicial attempts to reconcile the religion clauses, see, *e.g.*, Abington School Dist. v. Schempp, 374 U.S. 203, 222 (1963) (neutrality); Zorach v. Clauson, 343 U.S. 306 (1952) (accommodation); Everson v. Board of Educ., 330 U.S. 1, 15-16 (1947) (strict separation). *See* P. KAUPER, *supra* note 18, at 59. For attempts by commentators, see, *e.g.*, W. KATZ, RELIGION AND AMERICAN CONSTITUTIONS 91 (1964) ("impact of the First Amendment on religion is best understood in terms . . . of government neutrality"); P. KURLAND, *supra* note 18, at 18 (no "classification in terms of religion"); Kauper, *Schempp and Sherbert: Studies in Neutrality and Accommodation*, [1963] RELIGION & PUB. ORD. 3, 27 (1964) ("benevolent neutrality").

137. *See* pp. 551-53 *infra*.

alleviation of free exercise abridgments must not violate this constitutional provision.

Approaches to relief from an unconstitutional burden can be divided into three categories. Ordinarily, exemption from a state program or requirement can safeguard the free exercise of individuals suffering abridgment. Also, neutralization of governmental action, by implementation of a less burdensome means to achieve the state purpose, can accommodate the religious exercise of affected individuals.[138] Finally, elimination of the state program or requirement can alleviate the restraint on religious liberty.[139] The judiciary might order exemption in a situation in which that remedy would prove adequate. Because "[s]chool authorities have the primary responsibility for . . . solving [varied local school] problems,"[140] a court might remand the case to educational authorities to consider alternative means in circumstances in which exemption would be inadequate. These school authorities would consider means less burdensome than the offending program for satisfying legitimate state concerns, while the court would retain jurisdiction to insure protection of free exercise.[141]

138. For example, in Pitts v. Knowles, 339 F. Supp. 1183 (W.D. Wis. 1972), *aff'd mem.*, 478 F.2d 1405 (7th Cir. 1973), a Muslim inmate challenged the restricted availability of the Koran in comparison with an abundant supply of Bibles. *Id.* at 1185. The court required the prison to provide equal access to the Koran, thereby neutralizing the governmental program of provision of sacred texts, rather than ending the program or implementing a meaningless exemption. *Id.* at 1186; *cf.* Jones v. Butz, 374 F. Supp. 1284, 1286 (S.D.N.Y. 1974), *aff'd*, 419 U.S. 806 (1974) (legislative neutralization to avert abridgment of exercise of some religions).

139. For example, in State v. Whisner, 47 Ohio St. 2d 181, 351 N.E.2d 750 (1976), a private sectarian school alleged that state "minimum standards" for schools impeded Bible instruction demanded by a religious faith. The Ohio Supreme Court eliminated the requirement as an abridgment of free exercise, rather than exempting the school from the law or neutralizing the requirement, and pointed to the possibility of less burdensome means which the legislature could adopt. *Id.* at 216-18, 351 N.E.2d at 771. The state subsequently enacted a neutralized law. *See* OHIO REV. CODE ANN. § 3301.07 (Page Supp. 1976).

140. Brown v. Board of Educ., 349 U.S. 294, 299 (1955).

141. The judiciary should take an approach in vindicating free exercise rights somewhat like its approach in protecting Fourteenth Amendment rights. In *Brown* the Supreme Court recognized that "[s]chool authorities have the primary responsibility for elucidating, assessing, and solving [varied local school] problems," and so "remand[ed] the cases to those [trial] courts" for "consider[ing] whether the action of school authorities constitutes good faith implementation of the governing constitutional principles." *Id.* at 299. While educational officials prepared proposals, the judiciary retained jurisdiction. *Id.* at 301. In fashioning and implementing their final decrees, the trial courts applied equitable principles. *Id.* at 300; *see* Milliken v. Bradley, 97 S. Ct. 2749, 2757 (1977). Equitable relief to restore infringed Fourteenth Amendment rights has included remedial educational programs. *Id.* at 2759. *See, e.g.*, United States v. Missouri, 523 F.2d 885, 887 (8th Cir. 1975); George v. O'Kelly, 448 F.2d 148, 150 (5th Cir. 1971); Hart v. Community School Bd., 383 F. Supp. 699, 757 (E.D.N.Y. 1974), *aff'd*, 512 F.2d 37 (2d Cir. 1975). The courts would implement elimination in situations in which all alternative means fail to protect free exercise or violate the establishment clause or other constitutional provisions. *See* p. 566 & notes 251-57 *infra*.

A. *Exemption*

Exemption is the preferred remedy if it effectively removes the burden from free exercise, because it least interferes with the state interest in an existing program. It is especially appropriate where a very substantial state interest underlies the present form of a program in public schools,[142] where grave disruption of a governmental undertaking would accompany adoption of any alternatives to challenged aspects of the undertaking,[143] or where the least burdensome means already have been employed by school curricula or activities.[144] Exemption also is appropriate where the complainants disfavor other possible approaches to alleviating the abridgment,[145] where the maturity of the students affected reduces the extent of restraint on free exercise,[146] or where only an insubstantial part of the school curricula or activities elicits the challenge.[147]

None of these special factors is present where exclusive instruction

142. Government has a compelling interest in vaccination, *see* note 126 *supra*, so permissive accommodation of religious objection to vaccination requirements takes the form of exemption. *See, e.g.*, Kleid v. Board of Educ., 406 F. Supp. 902 (W.D. Ky. 1976); State v. Miday, 263 N.C. 747, 140 S.E.2d 325 (1965). The state has a similar interest in laws against fraud, so the Supreme Court exempted the "I Am" religion from consideration of the verity of its doctrines while sustaining an antifraud statute. *See* United States v. Ballard, 322 U.S. 78 (1944).

143. Grave interference with an unemployment compensation system would result from elimination of the eligibility requirement that an applicant accept available work, so the Supreme Court exempted a Seventh-day Adventist from the requirement. *See* Sherbert v. Verner, 374 U.S. 398, 409 (1963).

144. Where public school instruction already has been neutralized, as by presentation of alternate viewpoints on a subject that has implications for religion such as sex education, excusal is the proper remedy though complainants seek exclusion of all viewpoints except their own. *See* Citizens for Parental Rights v. San Mateo County Bd. of Educ., 51 Cal. App. 3d 1, 21, 24, 124 Cal. Rptr. 68, 84, 86 (1975), *appeal dismissed*, 425 U.S. 908 (1976); Hopkins v. Hamden Bd. of Educ., 29 Conn. Supp. 397, 414, 289 A.2d 914, 923 (C.P. 1971).

145. Where individuals oppose all forms of a state program or requirement rather than merely an unneutral form, as in the Amish objection to compulsory education after eighth grade, exemption is proper even if more extensive relief may be merited. *See* Wisconsin v. Yoder, 406 U.S. 205, 209 (1972).

146. College students are less vulnerable than secondary or elementary school students to influence by professors and fellow students or pressure toward conformity. *See* Roemer v. Maryland Bd. of Pub. Works, 426 U.S. 736, 750 (1976); Tilton v. Richardson, 403 U.S. 672, 685-86 (1971). Furthermore, in higher levels of education the student body is less cohesive and larger, so other students are less aware of exemption of an individual from a school program; and more course options are available while fewer courses are prescribed, so not enrolling in a college course is different from requesting exemption from a high school course. *See* P. KAUPER, *supra* note 18, at 98.

147. Because the words "under God" in the pledge of allegiance are an insignificant part of opening exercises in public school classrooms, easily omitted without others noticing, exemption from reciting those words was adequate relief. Lewis v. Allen, 5 Misc. 2d 68, 74, 159 N.Y.S.2d 807, 813 (Sup. Ct. 1957), *aff'd*, 11 App. Div. 2d 447, 207 N.Y.S.2d 862 (1960), *aff'd*, 14 N.Y.2d 867, 252 N.Y.S.2d 80 (1964), *cert. denied*, 379 U.S. 923 (1964). Religious references in the national anthem also are "incidental" and thus only require exemption. *See* Sheldon v. Fannin, 221 F. Supp. 766, 774 (D. Ariz. 1963).

in the general theory abridges free exercise. The state does not have a compelling interest in exclusive presentation of that theory;[148] alternative means would not necessarily frustrate the governmental interest in teaching biology or including the general theory; and sufficient alternatives are less burdensome for religious exercise.[149] Furthermore, there is no reason to believe that most creationist students would prefer exemption; secondary and elementary school students are susceptible to coercive pressures; and a biology course is a significant part of the academic curriculum.

Exemption is not an adequate remedy, besides not being the preferred remedy, when it fails to remove the burden on free exercise. This occurs if coercion persists against religious freedom, and may occur if the abridgment potentially affects a large number of individuals.

1. *Persistent Coercion*

The adequacy of exemption as a remedy is questionable when, despite the availability of exemption from a course or individual class, coercive pressures persist. The federal district court in *Schempp v. Abington School District*,[150] for example, ruled that compulsion from influence of teachers and fellow students and from the tendency toward conformity destroyed the effectiveness of exemption from classroom Bible reading.[151] In fact, Donna Schempp did not request exemption because it would impair her standing with teachers and peers.[152] Although the Supreme Court based its subsequent decision on the establishment ground, Justice Brennan argued in concurrence that the program abridged free exercise despite "the availability of excusal," because students are reluctant "to step out of line or to flout 'peer-group norms,'" to profess unpopular beliefs publicly, or "to be stigmatized as . . . nonconformists simply on the basis of their request."[153] Consequently, "the excusal procedure itself necessarily operates in such a way as to infringe the rights of free exercise of those

148. *See* note 129 *supra*.

149. *See* pp. 550-70 *infra*.

150. 177 F. Supp. 398 (E.D. Pa. 1959), *vacated and remanded*, 364 U.S. 298 (1960), *on remand*, 195 F. Supp. 518 (E.D. Pa. 1961), *aff'd*, 374 U.S. 203 (1963).

151. 177 F. Supp. at 406. The program abridged free exercise, *id.* at 408, even though excusal was available. 374 U.S. at 207, 211 n.4.

152. 374 U.S. at 208. Donna even volunteered to do some of the Bible reading herself. 177 F. Supp. at 400.

153. 374 U.S. at 288, 290. Justice Harlan, subsequently commenting on *Schempp*, also acknowledged "the attendant pressures on the school children that such an exercise entails." Sherbert v. Verner, 374 U.S. 398, 423 (1963) (dissenting opinion).

children who wish to be excused" and "may well deter those children who do not wish to participate . . . from exercising an indisputably constitutional right to be excused."[154] Justice Brennan's concurrence echoed a theme articulated earlier by Justice Frankfurter, that the availability of exemption from a program "does not eliminate the operation of influence by the school in matters sacred to conscience . . . . The law of imitation operates, and non-conformity is not an outstanding characteristic of children."[155] Moreover, several state courts have determined that persisting coercion renders exemption from the classroom illusory.[156]

Exemption of creationist students from those individual classes within a course that exclusively teach the general theory of evolution would be inadequate, because it would fail to counter the coercive effects of influence from teachers and pressure from peers.[157] Exemption from individual classes also would fail to alter the coercive effect of the unconstitutional condition on biology instruction. Where the general theory pervades much of a biology course, as is usually the case,[158] students confront a coercive choice between missing much other material with which the general theory is interwoven and subordinating their religious objections against participation in those classes.[159] Although the district court in *Wright v. Houston Inde-*

154. 374 U.S. at 288, 289. *See* Weclew, *supra* note 96, at 363-64.

155. McCollum v. Board of Educ., 333 U.S. 203, 227 (1948) (Brennan, J., concurring). Although the decision in *McCollum* rested on the establishment clause, the Court also acknowledged pressure from teachers and fellow students, *id.* at 209, 212, and "found that this system had the effect of coercing the children to attend religious classes." McGowan v. Maryland, 366 U.S. 420, 452 (1961). *See* note 96 *supra.*

156. *See, e.g.*, People v. Board of Educ., 245 Ill. 334, 351, 92 N.E. 251, 256 (1910) (excusal inadequate because places student "at a disadvantage" and "subjects him to a religious stigma"); Herold v. Parish Bd. of School Directors, 136 La. 1034, 1050, 68 So. 116, 121 (1915) (exemption worthless because isolates and stigmatizes student); State v. District Bd. of School Dist. No. 8, 76 Wis. 177, 200, 44 N.W. 967, 975 (1890) (exemption insufficient because pupil is "subjected to reproach").

157. Moreover, the necessity of a number of exemptions from class on nonconsecutive days would magnify pressure against excusal. Because the general theory appears in many parts of the ordinary biology course, rather than in a block, *see* note 104 *supra*, the act of exemption would have to occur not just once but many times during the academic year. Also, the controversial nature of the origin of the universe and living forms would appear to make this coercion potentially even greater. And a school structure without segmented classes for each subject would add to coercive forces. Because most elementary schools that teach biology, as well as a few high schools, do not change classrooms, switch teachers, and shift class membership for each different subject, the act of excusal would be more visible while the peer group would be more cohesive than in other schools.

158. *Compare* note 104 *supra with* notes 26-30 *supra.*

159. Relief in unconstitutional condition cases is not restricted to exemption. The impact of an unconstitutional choice can be just as severe as the effect of a direct prohibition against religious exercises. Hence the Supreme Court ordered elimination rather than exemption in Torcaso v. Watkins, 367 U.S. 488 (1961), and excusal has proved in-

pendent School District[160] found exemption sufficient, it failed to consider these pressures that arise from teacher and student influence and from the unconstitutional condition.[161]

Exemption from an entire course that exclusively teaches the general theory would also be inadequate. Although school officials might remove biology as a graduation requirement, the unconstitutional condition on that public benefit would continue to penalize free exercise, because making the course elective would not reduce the importance of the material contained in the course. Where creationist individuals value instruction in other aspects of biology, for college preparation or career plans or general education, the coercive choice persists. Influence from teachers and peers also would persist in pressuring creationist students to ignore the availability of excusal and to subordinate their nonconforming religious scruples. Although this pressure may not be as acute as the coercion against exemption from individual classes, influence would still exist to follow the normal course pattern or to accept the prevailing viewpoint.

Thus neither exemption from the class nor exemption from the course would adequately alleviate abridgment from exclusive instruction in the general theory. In contrast to *Yoder*, where excusal terminated pressure from school authorities and peer groups because the Amish students left the school rather than just a course,[162] coercion from instructors and fellow students would continue unabated. In contrast to *Sherbert*, where exemption made receipt of unemployment compensation as well as exercise of sabbatarian convictions possible,[163] coercion from the unconstitutional choice would persist unmitigated.

sufficient in other unconstitutional condition cases implicating the First Amendment. Speiser v. Randall, 357 U.S. 513, 529 (1958); Thomas v. Collins, 323 U.S. 516, 540 (1945); Lovell v. Griffin, 303 U.S. 444 (1938). *See* Abington School Dist. v. Schempp, 374 U.S. 203, 293 (1963) (Brennan, J., concurring).

160. 366 F. Supp. 1208 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974).

161. *Id.* at 1212. *Wright* addressed only the objection that exemption entails a religious profession of faith, and not the more weighty objections that this option is effectively unavailable because of deprivation of a public benefit and pressure from teachers and students. *See* note 61 *supra*.

162. The Amish students returned to a separate community, and consequently no longer came into contact with former teachers or peers in other classes, at lunch, after school, or on weekends. *See* 406 U.S. 205, 222 (1972); J. HOSTETLER, *supra* note 46, at 21.

163. Exemption in *Sherbert* made receipt of the public benefit possible, whereas exemption from a biology course makes enjoyment of that public benefit impossible. Moreover, Mrs. Sherbert as an adult was not susceptible to the pressures to which secondary and elementary school students are susceptible, and her acquaintances might never have learned of her exemption or its religious basis.

2. *Widespread Potential Abridgment*

The value of exemption as a remedy is doubtful when widespread abridgment might occur. As the potential impact grows, excusal becomes less preferable to the state because its interference with school curricula approaches in degree that of alternative remedies. The Supreme Court has not given explicit recognition to this factor in free exercise cases, but potential impact provides a unifying principle behind the remedies chosen in many of the Court's decisions. In general, where the Court has ordered exemption governmental action has actually and potentially threatened the free exercise of a relatively small number of individuals, and where it has required more extensive relief the state has threatened the freedom of a comparatively great number.[164]

The complainants were exempted in *Yoder* where only ninety-three Amish children attended public schools in the state,[165] and in *Sherbert* where nearly all Seventh-day Adventists had found employment without Saturday labor.[166] The Supreme Court has granted exemption in other cases that appear to have involved a limited potential impact on free exercise.[167] On the other hand, the state requirement was eliminated in *Torcaso v. Watkins*,[168] where a religious oath for state office potentially abridged the free exercise of all applicants for govern-

164. Substantial membership of religions burdened by a governmental program indicates a great potential abridgment of free exercise.

165. Petition for Certiorari at 12, Wisconsin v. Yoder, 406 U.S. 205 (1972). Only 256 Amish children of school age lived in the state; only those who had completed eighth grade without reaching age 16 were affected by the statute. Wisconsin v. Yoder, 406 U.S. at 246 n.4 (Douglas, J., dissenting in part).

166. Only two Adventists in that area had been excluded from unemployment benefits because of inability to find non-Saturday work, while nearly 150 members of that religion had found suitable employment. Sherbert v. Verner, 374 U.S. 398, 399 n.2 (1963). Only 1000 Adventists resided in the state; only some were of working age. Brief of Amici Synagogue Council *et al.* at 12, Sherbert v. Verner, 374 U.S. 398 (1963).

167. Exemption has been the remedy in four other major Supreme Court decisions involving free exercise. United States v. Ballard, 322 U.S. 78 (1944) ("I Am" movement, with its rather unique religious practices, from consideration of verity of its doctrines in fraud prosecution); Follett v. Town of McCormick, 321 U.S. 573 (1944) (Jehovah's Witnesses, for whom publication sales is a particularly integral activity, from book agent tax and literature license tax); Murdock v. Pennsylvania, 319 U.S. 105 (1943) (same); Cantwell v. Connecticut, 310 U.S. 296 (1940) (same religion, in selling religious literature and playing controversial recordings, from publication license and breach of peace ordinances). In two other decisions, exemption was granted by statute while no remedy was mandated by the free exercise clause, so widespread abridgment was not relevant to the choice of remedy. Welsh v. United States, 398 U.S. 333 (1970) (from military conscription); United States v. Seeger, 380 U.S. 163 (1963) (same). Relief from military service is a permissive accommodation rather than a constitutional right. *See, e.g.*, United States v. MacIntosh, 283 U.S. 605, 624 (1931); United States v. Koehn, 457 F.2d 1332, 1334 (10th Cir. 1972).

168. 367 U.S. 488 (1961).

mental employment,[169] and in *Pierce v. Society of Sisters*,[170] where a law compelled attendance at public schools and affected all students in religious and private schools.[171] The Court has provided similar relief in other cases that appear to have threatened a great impact on religious exercise.[172]

The potential impact on free exercise from exclusive public school presentation of the general theory would appear to be very widespread and substantial. More than fourteen million individuals in the nation are adherents of religions that explicitly teach special creation, and many other individuals attend creationist churches or hold creationist convictions but are part of ecclesiastical organizations divided on that doctrinal issue.[173] This, like persistent coercion, renders exemption inadequate as a remedy.

B. *Neutralization*

Public school instruction found to abridge free exercise of religion can be neutralized by incorporation of countervailing viewpoints. Just

169. *Id.* at 490 (law "bar[red] every person who refuses to declare a belief in God from holding a public 'office of profit or trust' in Maryland," including positions of school teacher and notary public).

170. 268 U.S. 510 (1925).

171. *Id.* at 534 ("The inevitable practical result of enforcing the Act under consideration would be destruction of appellees' primary schools, and perhaps all other private primary schools for normal children within the State of Oregon."); *cf.* State v. Whisner, 47 Ohio St. 2d 181, 215, 351 N.E.2d 750, 770 (1976) (" '[M]inimum standards' under attack herein effectively repose power in the state . . . to control the essential elements of nonpublic education . . . .") The Court based its decision in *Pierce* on the fundamental right of parents to send their children to a religious or other private school, rather than on the free exercise clause directly, which at that time had not been extended to the states. 268 U.S. at 535. This holding was followed in *Yoder*, where the Supreme Court implied that the result in *Pierce* might have a constitutional basis besides substantive due process: "[h]owever read, the Court's holding in *Pierce* stands as a charter of the rights of parents to direct the religious upbringing of their children." 406 U.S. at 233. This alternative foundation was elaborated in Committee for Pub. Educ. v. Nyquist, 413 U.S. 756 (1973), where the Court stated that "a state law interfering with a parent's right to have his child educated in a sectarian school would run afoul of the Free Exercise Clause." *Id.* at 788. The parent's right to free exercise hence appears to include his interest in the child's religious upbringing. State v. Yoder, 49 Wis. 2d 430, 438, 182 N.W.2d 539, 542 (1971), *aff'd*, 406 U.S. 205 (1972).

172. Elimination has been the remedy in five other decisions of the Supreme Court in major free exercise cases. Kedroff v. St. Nicholas Cathedral, 344 U.S. 94 (1952) (statute authorizing official recognition of one church faction potentially permitted intervention in any church dispute); Kunz v. New York, 340 U.S. 290 (1951) (ordinance prohibiting public worship on city streets without discretionary permit potentially threatened a common religious exercise); Marsh v. Alabama, 326 U.S. 501 (1946) (prohibitions on literature distribution also potentially applied to many religions); Martin v. City of Struthers, 319 U.S. 141 (1943) (same); Largent v. Texas, 318 U.S. 413 (1943) (requirements for literature licenses had similar potential effect).

173. *See* notes 21-22 *supra*. In addition, many of the 64 million Mormons, Roman Catholics, and Southern Baptists affirm divine creation. *See* note 22 *supra*.

as public school instruction from one nonreligious viewpoint may be contrary to the tenets of some religions yet consistent with the principles of others, alternative nonreligious perspectives may harmonize with the tenets of the objecting faiths. For example, if a public school philosophy course addressed the subject of the existence of God in a nonreligious context, but considered only Kierkegaard and Aquinas and others defending the theistic position, incorporation of Nietzsche and Griffin and others taking the atheist position might neutralize the course. Addition by public school authorities of one or more nonreligious theories of origin to courses that present the general theory of evolution similarly provides one method of relief for the infringement of free exercise of creationist religions.

Approaches to removal of an abridgment of religious exercise must not contravene the establishment clause of the First Amendment. This provision requires substantial neutrality on the part of government toward religions.[174] The Supreme Court has fashioned a tripartite test to define the reach of the establishment clause and the contours of neutrality. It forbids legislative or judicial action with a primary effect of aid or opposition to religions, a nonsecular legislative purpose of advancement of particular religions, or an excessive entanglement of the state with religions.[175] Although an overly expansive construction of the establishment clause can create conflict with the free exercise clause,[176] the establishment prohibition properly construed demands only substantial neutrality,[177] and not an absolute separation or an impenetrable wall between church and state.[178] Consequently the

174. The establishment clause requires that government must be "neutral in its relations with groups of religious believers and non-believers." Everson v. Board of Educ., 330 U.S. 1, 18 (1947).

175. Lemon v. Kurtzman, 403 U.S. 602, 612-13 (1971).

176. Katz, *Freedom of Religion and State Neutrality*, 20 U. CHI. L. REV. 426, 428 (1953); Note, *Religious Accommodation Under* Sherbert v. Verner: *The Common Sense of the Matter*, 10 VILL. L. REV. 337, 341 (1965).

177. This substantial neutrality standard averts some of the tension between the religion clauses. *See* Committee for Pub. Educ. v. Nyquist, 413 U.S. 756, 788 (1973) ("As a result of this tension, [Supreme Court] cases require the State to maintain an attitude of 'neutrality.' "); Walz v. Tax Comm'n, 397 U.S. 664, 669 (1970) ("neutrality . . . derives from an accommodation of the Establishment and Free Exercise Clauses"); P. KAUPER, *supra* note 18, at 67-79.

178. Lemon v. Kurtzman, 403 U.S. 602, 614 (1971) ("Our prior holdings do not call for total separation between church and state; total separation is not possible in an absolute sense. . . . [T]he line of separation, far from being a 'wall,' is a blurred, indistinct, and variable barrier depending on all the circumstances of a particular relationship."); Gillette v. United States, 401 U.S. 437, 450 (1971) ("The metaphor of a 'wall' or impassable barrier between Church and State, taken too literally, may mislead constitutional analysis . . . ."); Zorach v. Clauson, 343 U.S. 306, 312 (1952) ("The First Amendment, however, does not say that in every and all respects there shall be a separation of Church and State.") A substantial neutrality standard conforms more to the purpose of the establishment clause

establishment clause does not prohibit all recognition of the nation's theistic heritage[179] or extension of general benefits to religious as well as secular organizations.[180] It does not bar neutral state action that harmonizes with religious exercises[181] or prevent objective and neutral study about religion in public schools.[182] Nor does it preclude mandatory accommodations of religion that alleviate abridgment of free exercise or some permissive accommodations that avert restraint of religious freedom,[183] even though these involve affirmative govern-

than does a "wall of separation" rule of absolute neutrality. *See* W. KATZ, *supra* note 136, at 91. The concept of "separation of church and state" might overextend the establishment clause because of change in the meaning of that phrase. M. HOWE, THE GARDEN AND THE WILDERNESS 5-6 (1965).

179. W. KATZ, *supra* note 136, at 23 ("[T]he secular nature of the state need not be enforced with rigid absolutism. . . . [H]istoric religious roots of our institutions" need not be deracinated from "traditional civic ceremonies and literature and symbols.") The establishment clause does not compel removal of things that acknowledge the religious heritage of this country, as an absolute neutrality standard would demand. Zorach v. Clauson, 343 U.S. 306, 312-13 (1952). It does not prevent reference to God on coins, in the pledge of allegiance, in the national anthem, or in invocations of courts and legislatures; it does not bar religious proclamations by the President or administration of oaths on the Bible. Abington School Dist. v. Schempp, 374 U.S. 203, 299, 303, 304 (1963) (Brennan, J., concurring); Engel v. Vitale, 370 U.S. 421, 435 n.21 (1962); Aronow v. United States, 432 F.2d 242, 243 (9th Cir. 1970); Sheldon v. Fannin, 221 F. Supp. 766, 774 (D. Ariz. 1963).

180. The establishment clause permits extension of general benefits to all individuals or organizations within a secular class, even though those benefits secondarily aid a religion. Everson v. Board of Educ., 330 U.S. 1, 16 (1947); P. KAUPER, *supra* note 18, at 108. *E.g.*, Roemer v. Board of Pub. Works, 426 U.S. 736 (1976) (nondesignated subsidy to nonseminary universities); Walz v. Tax Comm'n, 397 U.S. 664, 675 (1970) (tax exemption for nonprofit organizations); Board of Educ. v. Allen, 392 U.S. 236 (1968) (textbooks in secular subjects for schools).

181. McGowan v. Maryland, 366 U.S. 420, 442 (1961) ("[T]he 'Establishment' Clause does not ban federal or state regulation whose reason or effect merely happens to coincide or harmonize with the tenets of some or all religions.") Hence a Sunday closing law, which harmonizes with the religious practices of Sunday worshipers, does not have a primary effect of aiding religion. *Id.* at 445. Criminal laws against murder, polygamy, and theft that accord with theological tenets of many religions, do not establish religion. Abington School Dist. v. Schempp, 374 U.S. 203, 303 (1963) (Brennan, J., concurring); McGowan v. Maryland, 366 U.S. 420, 442 (1961). And a provision of the Humane Slaughter Act, for "slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that prescribes a [throat-slitting] method," does not contravene the establishment clause. Jones v. Butz, 374 F. Supp. 1284, 1286, 1292 (S.D.N.Y.), *aff'd*, 419 U.S. 806 (1974).

182. The establishment clause does not forbid "teaching *about* religion" though it prohibits "teaching *of* religion," because teaching about religion does not advance some religions and hinder others as long as it is substantially neutral. Abington School Dist. v. Schempp, 374 U.S. 203, 306 (1963) (Goldberg, J., concurring) (emphasis in original). Hence schools may use the Bible in literature or history classes, in presenting a secular subject in a substantially neutral manner, "consistently with the First Amendment," *id.* at 225 (opinion of the Court). *Id.* at 300 (Brennan, J., concurring); *see* Epperson v. Arkansas, 393 U.S. 97, 106 (1968).

183. Katz, *supra* note 176, at 428 ("[T]he separation principle does not preclude action to avoid restraints on religious freedom . . . .") Reading the establishment clause so broadly as to require total separation or absolute neutrality would bring that clause into

mental action[184] and affect other individuals.[185] Although these various state activities might have a secondary religious impact that would be invalidated under an absolute neutrality standard, they do not have a primary religious impact that would be overturned under the substantial neutrality standard.[186]

Presentation of biblical creation would contravene the establishment clause and thus could not be employed to neutralize a public

conflict with the free exercise protection. Instead the state must make mandatory accommodations for religion, protection which the free exercise clause requires, and it may make some permissive accommodations, which both religion clauses allow. Walz v. Tax Comm'n, 397 U.S. 664, 669-70, 673 (1970) ("limits of permissible state accommodation to religion are by no means co-extensive with the noninterference mandated by the Free Exercise Clause"); Zorach v. Clauson, 343 U.S. 306, 315 (1952) (public schools may "accommodate the religious needs of the people"); P. KAUPER, *supra* note 18, at 59. Preservation of the religious liberty of individuals placed by government in restrictive circumstances, such as provision of chaplains and churches at military bases and penal institutions, is one type of accommodation mandated by the First Amendment. Abington School Dist. v. Schempp, 374 U.S. 203, 297-98 (1963) (Brennan, J., concurring); Remmers v. Brewer, 361 F. Supp. 537 (S.D. Iowa 1973), *aff'd*, 494 F.2d 1277 (8th Cir.), *cert. denied*, 419 U.S. 1012 (1974); Katz, *supra* note 176, at 429. Alleviation of an abridgment of free exercise is another accommodation allowed by the establishment clause. 374 U.S. at 295, 302-03 (Brennan, J., concurring); Smith v. Smith, 523 F.2d 121, 124 (4th Cir. 1975), *cert. denied*, 423 U.S. 1073 (1976); Cummins v. Parker Seal Co., 516 F.2d 544, 552 (6th Cir. 1975), *aff'd mem. by an equally divided Court*, 429 U.S. 65 (1976). *See* note 226 *infra*.

184. Government may safeguard religious exercise through released-time programs from public schools. Zorach v. Clauson, 343 U.S. 306, 315 (1952); Smith v. Smith, 523 F.2d 121, 124 (4th Cir. 1975), *cert. denied*, 423 U.S. 1073 (1976). The state may provide religious schools on Indian reservations. Quick Bear v. Leupp, 210 U.S. 50 (1908). It may preserve free exercise through chaplains and churches in the armed forces and prisons. *See* note 183 *supra*. Government may provide for an alternative method of animal slaughter. Jones v. Butz, 374 F. Supp. 1284, 1293 (S.D.N.Y.), *aff'd*, 419 U.S. 806 (1974). It may require accommodation by employers of workers' religious exercise. Cummins v. Parker Seal Co., 516 F.2d 544, 552-54 (6th Cir. 1975), *aff'd mem. by an equally divided Court*, 429 U.S. 65 (1976). *See* P. KAUPER, *supra* note 18, at 17, 71, 75; Katz, *supra* note 176, at 429; Moore, *The Supreme Court and the Relationship between the 'Establishment' and 'Free Exercise' Clauses*, 42 TEX. L. REV. 142, 198 (1963).

The state may alleviate abridgment of free exercise by exemption from governmental programs, such as from compulsory education or military service or federal taxes. Wisconsin v. Yoder, 406 U.S. 205, 235 n.22 (1972); Gillette v. United States, 401 U.S. 437, 452-53 n.17 (1971); Walz v. Tax Comm'n, 397 U.S. 664, 675 (1970); W. KATZ, *supra* note 136, at 20 ("not efforts to promote or establish religion, but merely to maintain neutrality").

185. These positive programs may legitimately affect individuals outside the class accommodated, so long as their religious exercise is not abridged. The released-time programs in *Zorach* and *Smith* caused ordinary academic instruction to cease for both released and nonreleased students. 343 U.S. at 309; 523 F.2d at 122. An exclusion of birth control discussion from sex education and biology classrooms affected students including those without religious objections. Mercer v. Michigan State Bd. of Educ., 379 F. Supp. 580 (E.D. Mich.), *aff'd mem.*, 419 U.S. 1081 (1974) (upholding exclusion).

186. A state program with a primary religious impact advances religions more than it furthers secular aims, and so violates the establishment clause under the reasoning of Abington School Dist. v. Schempp, 374 U.S. 203 (1963). A "distinctively religious means" is necessary for an unconstitutional primary effect. P. KAUPER, *supra* note 18, at 64. A program with a secondary religious impact has implications for religions but still has a primarily secular effect. *See* Note, *Toward a Uniform Valuation of the Religion Guarantees*, 80 YALE L.J. 77, 79 n.14, 105 n.125 (1970).

school course.[187] Teaching of religion necessarily prefers some religions over others and lacks substantial neutrality.[188] Instruction in scientific creationism, however, would serve to neutralize a public school course that exclusively presents the general theory of evolution. Spokesmen for this perspective do not seek to ban Darwin's *Origin of Species* or to exclude the general theory from classrooms.[189] Instead, their model of scientific creationism proposes special creation of matter[190] and life,[191] postulates stability of original plant and animal kinds,[192] denies common ancestry of human beings with apes,[193] and offers catastrophism, the view that unique and cataclysmic events occurred in the past, as the underlying principle of geologic history.[194] This perspective suggests that the law of entropy, or change toward disorder, applies to the earth and living organisms,[195] and that the world and life came into existence relatively recently.[196] Textbooks presenting scientific creationism do not expound the Bible, but instead employ scientific discussion,[197] and their authors are highly trained in sci-

187. Daniel v. Waters, 515 F.2d 485 (6th Cir. 1975).

188. *See* Abington School Dist. v. Schempp, 374 U.S. 203 (1963); Engel v. Vitale, 370 U.S. 421 (1962).

189. *See* notes 10 & 12 *supra*.

190. *See* SCIENTIFIC CREATIONISM (PUBLIC SCHOOL EDITION) 17, 28 (H. Morris ed. Creation-Life Publishers 1974) [hereinafter cited as SCIENTIFIC CREATIONISM] ("[M]atter and energy . . . were specially created . . . ." The big-bang theory "does not account for the initial super-dense state" which it postulates, while the steady-state theory "does not account for the [initial] hydrogen" which it assumes.)

191. *See id.* at 46 (general theory requires that life arose from nonlife by present natural processes, yet "such evolution is *not* occurring today"; hence evolution model must be modified by unproved "assumption . . . that there were different [primeval] conditions," while creation model predicts that life is not evolving currently).

192. *See id.* at 79 ("[M]ost of the forms of plants and animals have arisen suddenly in the fossil record. There is no evidence that there have ever been transitional forms between these basic kinds.")

193. *See id.* at 178 ("[T]here is no objective evidence that man evolved from . . . animal ancestry." Fossils show "no intermediate or transitional forms leading up to man.")

194. *See id.* at 112, 117 (Geologic history indicates "the rapid destruction and burial of life in one age" from "waters pouring perpetually from the skies and erupting continuously from the earth's crust . . . until the entire globe was submerged.")

195. *See id.* at 38 ("creation model . . . explicitly predicts" second law of thermodynamics, the tendency toward entropy or disorder, while evolution model requires progressive change and integrative alteration that contradicts this law).

196. *See id.* at 136, 160 (The "creation model . . . fit[s] more naturally in a short chronology," and "many more [natural] processes . . . give young ages [for the earth, life, and man] than . . . old ages.")

197. The primary examples of scientific creationist materials are BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY (rev. ed. J.N. Moore & H. Slusher eds. Zondervan Pub. House 1974) (for secondary school students as general text); ORIGINS (R. Bliss ed. Creation-Life Publishers 1976) (for secondary school students as supplementary text); THE SCIENCE AND CREATION SERIES (H. Morris & J. Phelps eds. Creation-Science Research Center 1971) (for elementary school students as supplementary texts); SCIENTIFIC CREATIONISM, *supra* note 190 (for teachers). None of these textbooks expounds the Bible. *See* ORIGINS, *supra* at 31

ence.[198] Neutralization through scientific creationism raises complex questions under the establishment clause. These include whether that theory is religious in nature, whether its presentation in public schools would be unneutral, and whether it would infringe the rights of other individuals. These questions can be answered through an examination of the effect and purpose of instruction in scientific creationism.[199]

1. *Primary Effect*

The Sixth Circuit in *Daniel v. Waters*[200] considered the question of instruction from *Genesis* in public school science classes. A state statute required those biology textbooks used in public schools that presented evolution to give "commensurate attention" and "equal . . . emphasis" to *Genesis* and "other theories" of "the origins and creation of man and his world."[201] It excluded any "occult or satanical beliefs of human origin" from the other theories that must be taught, and excepted the Bible from the requirement of a disclaimer in each book that explanations of origins are "theory" rather than "scientific fact."[202] The court

("[C]onstruction of the Creation Model will be based upon scientific evidence that supports creation and flood geology."); SCIENTIFIC CREATIONISM, *supra* note 190, at iv ("[P]urpose . . . is to treat all of the more pertinent aspects of the subject of origins and to do this solely on a scientific basis, with no references to the Bible or to religious doctrine," thereby "showing that the creation model of origins and history may be used to correlate the facts of science at least as effectively as the evolution model."); Creation-Science Research Center, How To Use the Science and Creation Series 1 (undated) ("Creation is not taught . . . on the basis of Biblical or religious authority but solely as a scientific model . . . . Similarly, the evolutionary theory is not opposed in the books on religious grounds, but only because of its serious scientific deficiencies.")

198. The editor and the 23 consulting authors of *Scientific Creationism* include at least 14 creationists who hold doctorate degrees from nonsectarian universities in various fields of science; nine currently teach at nonreligious universities. *See* SCIENTIFIC CREATIONISM, *supra* note 190, at i-ii; Institute for Creation Research, 21 Scientists Who Believe in Creation (1974). The sponsor of *Biology: A Search for Order in Complexity* is the Creation Research Society, a scientific organization with approximately 500 members who have advanced degrees in the natural sciences. The 19 editors and authors include at least 12 individuals who have doctorates from nonreligious schools in science. *See* BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197, at xvi.

199. Neutralization would not bring "excessive entanglement" with religion, and so would not contravene the third aspect of the establishment clause test. Entanglement ordinarily is a financial question; additional financial expenditures would be small and no subsidy of a religious organization would occur. *See, e.g.*, Levitt v. Committee for Pub. Educ., 413 U.S. 472, 480 (1973); Lemon v. Kurtzman, 403 U.S. 602, 619 (1971). Preventing adoption of religious textbooks for biology would not require as much state supervision as monitoring texts for all subjects in the textbook loan program sustained in Board of Educ. v. Allen, 392 U.S. 236 (1968). Preventing presentation of religious views in the biology classroom would not necessitate even the degree of oversight in insuring secular use of sectarian college buildings financed through the construction grant programs upheld in Tilton v. Richardson, 403 U.S. 672 (1971), and Hunt v. McNair, 413 U.S. 734 (1973).

200. 515 F.2d 485 (6th Cir. 1975). *Accord*, Smith v. State, 242 So. 2d 692 (Miss. 1970); Steele v. Waters, 527 S.W.2d 72 (Tenn. 1975).

201. 515 F.2d at 487.

202. *Id.*

found this law to violate the establishment clause in several regards. The exclusion of occult views preferred some religions over others and entailed excessive entanglement.[203] The exception from the disclaimer requirement gave a "preferential position for the Biblical version of creation."[204] Although the provision for instruction from *Genesis* did not draw much criticism in the opinion, except for a long quotation without explanation from a Supreme Court opinion,[205] it violates the requirement for substantial neutrality because its primary effect necessarily is teaching of religion.

Incorporation of scientific creationism to neutralize public school instruction in the origin of the universe and life would not have this primary effect of advancing some religions. Although scientific creationism does harmonize with the teachings of many faiths, the general theory of evolution also coincides with the tenets of some other religions.[206] The establishment clause does not bar instruction in a

203. *Id.* at 491.

204. *Id.* at 489.

205. *Id.* at 489-91 (quoting Epperson v. Arkansas, 393 U.S. 97, 103-05, 106-07 (1968)). The Supreme Court in *Epperson* invalidated a state statute that proscribed discussion of evolution but permitted discussion of *Genesis* and that had been enacted for nonsecular purposes. *See* pp. 566-67 *infra*. That case is not determinative of the issue presented in *Daniel*, because the statute in *Epperson* did not require instruction from *Genesis* or require equal time for the Bible along with evolution. 515 F.2d at 495 (Celebrezze, J., dissenting).

206. One school of belief within Humanism regards its convictions as a religion. Kurtz, *Humanism and Religion: A Reply to the Critics of Humanist Manifesto II*, HUMANIST, Jan.-Feb. 1974, at 4. These religious Humanists ordinarily emphasize the general theory of evolution.

The renowned *Humanist Manifesto* declared its purpose to be proclamation of "religious humanism." Its 15 propositions stressed the general theory of evolution:

> *First*: Religious humanists regard the universe as self-existing and not created.
>
> *Second*: Humanism believes that man is a part of nature and that he has emerged as the result of a continuous process.
>
> ....
>
> *Fifth*: Humanism asserts that the nature of the universe depicted by modern science makes unacceptable any supernatural or cosmic guarantees of human values. . . . Religion must formulate its hopes and plans in the light of the scientific spirit and method.

A Humanist Manifesto, NEW HUMANIST, May-June 1933, at 1, 1-2, *reprinted in* HUMANIST, July-Aug. 1962, at 130, and 4 RELIGIOUS HUMANISM 61 (1970) (emphasis in original). The 24 original signatories included eleven ministers, a rabbi, and two seminary professors; "all but four can be readily identified as 'religious humanists'." Wilson, *The Religious Element in Humanism Pervades Its Origin, Inspiration and Support*, HUMANIST, Nov.-Dec. 1962, at 173. *See* Arisian, *A New Statement of Religious Humanism*, HUMANIST, Mar.-Apr. 1977, at 54; Sellars, *Religious Humanism*, NEW HUMANIST, May-June 1933, at 7.

Humanist Manifesto II also emphasized the general theory. *See* HUMANIST, Sept.-Oct. 1973, at 4, 6. One hundred seventy of its signatories were ministers of the Unitarian-Universalist Church, and many were members of the Fellowship of Religious Humanists. Wilson, *Pioneer of Evolutionary Humanism*, HUMANIST, May-June 1975, at 40. This Fellowship also shows a conjunction of the general theory with religious Humanism. *See, e.g.*, Haydon, *Is Scientific Humanism Religious?*, 2 RELIGIOUS HUMANISM 49 (1968). *Compare Humanism, A New Religion*, 2 RELIGIOUS HUMANISM 96 (1968) *with* C. POTTER, HUMANISM: A NEW RELIGION 15, 114 (1930).

scientific and nontheological model of origins that is consistent with religious belief in creation, however, any more than it proscribes a model that reinforces a religious belief in the general theory.[207] Reference to a creator or designer does not contravene the establishment clause,[208] nor is teleological discussion excluded from public schools.[209] Moreover, the establishment provision does not prohibit use of scientific material written or advocated by individuals holding strong reli-

207. Enactment of a Sunday closing law does not have a primary effect of advancing religion, though it "happens to coincide or harmonize with the tenets of some or all religions." McGowan v. Maryland, 366 U.S. 420, 442 (1961). Similarly, promulgation of a requirement for accommodation of employees' religious exercises does not have an unconstitutional primary effect. Cummins v. Parker Seal Co., 516 F.2d 544, 553 (6th Cir. 1975), *aff'd mem. by an equally divided Court*, 429 U.S. 65 (1976). *See* notes 181 & 186 *supra*.

208. Mention of God in the pledge of allegiance in public schools, and reference to "the Power that hath made and preserved us a nation" or "'In God is our trust'" in the national anthem, do not establish religion. *See* note 179 *supra*. Mention of a creator may be part of objective and neutral study of a secular subject, which the establishment clause permits, *see* note 182 *supra*, so long as description of the creator or sacred authority is not the primary nature of the study. If the establishment clause were construed to prohibit reference to deity, Darwin's *Origin of Species* could not be assigned in public schools, because it often mentions "the Creator," and ends with the statement that "[t]here is grandeur in this view of life . . . having been originally breathed by the Creator into a few forms." C. DARWIN, THE ORIGIN OF SPECIES 759 (Variorum ed. 1959) (second through sixth eds.). *See id.* at 343, 753, 757-58. Similarly, one major high school biology text could not be used because it quotes this same passage. BSCS BLUE, *supra* note 25, at 100. If the establishment clause were construed to prohibit incidental allusion to the creator's attributes or incidental reference to the Bible, this and another secondary school text would be excluded through their mention of "'the Supreme and Omnipotent Creator'" and "the flood recorded in Genesis of the Hebrew Bible." BSCS BLUE, *supra* note 25, at 111; BSCS GREEN, *supra* note 25, at 310.

209. Some individuals have argued that reasoning from design presupposes the existence of a designer and the supernatural, that science must exclude the supernatural because scientific methods of observation and experimentation cannot be applied, and thus that teleology and creation cannot enter into valid science. J.A. Moore, *supra* note 4, at 186. The producer of three major textbooks asserts that creationism cannot be scientific because it presupposes a creator. Mayer, *Creationism: A Masquerade*, 36 AM. BIOLOGY TCHR. 245, 246 (1974).

Scientific creationists have responded, first, that "creation is as scientific as evolution and . . . evolution is as religious as creation," so that "belief in evolution requires at least as much faith . . . as creation." H. Morris, *supra* note 12, at 1, 11. They suggest that the general theory, to the same extent as scientific creationism, is nonobservable, nonverifiable, and nonfalsifiable. SCIENTIFIC CREATIONISM, *supra* note 190, at 4-8 (citing authorities); *cf.* Matthews, *Foreword* to C. DARWIN, ORIGIN OF SPECIES at xi (1971) ("Belief in the theory of evolution is thus exactly parallel to belief in special creation—both are concepts which believers know to be true but neither, up to the present, has been capable of proof.") They have replied, second, that the general theory has its own teleology, which ascribes design to nature or natural selection much as creationism ascribes design to a creator. *Cf.* Ayala, *Teleological Explanations in Evolutionary Biology*, PHILOSOPHY SCI., March 1970, at 2 (Darwin "substituted a scientific teleology for a theological one" of "natural laws manifested in natural processes").

Mandating that public schools *cannot* present any concept of teleology or creation would be affirmative rejection and exclusion by the state of concepts consistent with some religions. This might result in state unneutrality and hostility toward religion, which would contravene the First Amendment. Zorach v. Clauson, 343 U.S. 306, 314 (1952); Everson v. Board of Educ., 330 U.S. 1, 18 (1947).

gious convictions, whether Christians and others having faith in the *Genesis* account of creation[210] or nontheists giving credence to a religious variety of Humanism.[211] Just as instruction in the general theory does not have a primary effect of aid or opposition to religion, presentation of scientific creationism does not have a primary effect that establishes religion.[212]

It has been asserted that neutralization of the subject of origins is impossible because any concept of creation necessarily is primarily

210. It is true that the authors of the major scientific creationist textbooks are Christians representing a variety of denominations or fellowships, and that in other places some have written in support of biblical creation. The personal beliefs of the authors do not render their works religious in nature, or the contents religious doctrine. The establishment clause does not ban use in public schools of literary works authored by individuals holding strong convictions about religion, whether *Moby Dick* by Melville or *Candide* by Voltaire.

The existence of criticism of the general theory based upon nonreligious arguments and motivations shows the absence of a primarily religious effect from the same critique authored by a creationist. Such scientific discussion by a creationist does not lose its secular nature by its consistency with his personal religious beliefs. One author, without recourse to revelation or deity, has concluded that classical Darwinism is "sadly decayed" and that neo-Darwinism has a "precarious status." N. MACBETH, DARWIN RETRIED 134, 141 (1971). An English scientist also challenges the general theory not on religious but scientific grounds. G. KERKUT, *supra* note 2, at 150-57. "[T]he most distinguished of French zoologists," Pierre P. Grassé, in *L'Evolution du Vivant*, launched "a frontal attack on all kinds of 'Darwinism.'" Dobzhansky, *Darwinian or "Oriented" Evolution?*, 29 EVOLUTION 376 (1975). A large "silent group of students engaged in biological pursuits" disagrees with much or all of the general theory. Olson, *Morphology, Paleontology and Evolution*, in 1 EVOLUTION AFTER DARWIN, *supra* note 33, at 523 (S. Tax ed.).

211. Sir Julian Huxley, a prominent author on the subject of the general theory, believed in a "religion of evolutionary humanism." Huxley, *The Coming New Religion of Humanism*, HUMANIST, Jan.-Feb. 1962, at 3, 5. His religion was "not based on revelation in the supernatural sense, but on the revelations [of] science," *id.* at 5, that "all reality is in a perfectly valid sense one universal process of evolution." *Id.* at 4. He regarded the general theory of evolution as the primary element in Humanism. Huxley, *Evolutionary Humanism*, HUMANIST, Sept.-Oct. 1952, at 201, 206. He entitled the concluding chapter of one book "Evolutionary Humanism as a Developed Religion." J. HUXLEY, RELIGION WITHOUT REVELATION 203 (rev. ed. 1957). *Cf.* G. HIMMELFARB, DARWIN AND THE DARWINIAN REVOLUTION 381 (1962) (Darwin wrote, as he formulated his evolutionary theory, that "'disbelief crept over me at a very slow rate, but was at last complete.'")

212. It appears unfair to characterize scientific creationism as "smuggling of religious dogma into classrooms in a scientific Trojan horse," Mayer, *supra* note 209, at 246, or as "forced imposition of religious doctrine, disguised as science, into the science textbooks." *Statements by Scientists in the California Textbook Dispute*, 34 AM. BIOLOGY TCHR. 411, 415 (1972). One noncreationist author objected to this approach, writing that "[n]or, as [creationists] are sometimes accused of doing, are they trying to put Genesis into the biology books." Wade, *supra* note 10, at 725. *Accord*, S. Darby, Creation Controversy in California 56 (Apr. 20, 1976) (unpublished B.A. thesis for Princeton University, Dep't of Biology). Just as the general theory of evolution is neither a religious doctrine nor religious Humanism, although many religious creationists characterize it as that, scientific creationism is neither a religious doctrine nor *Genesis* in disguise, although many proponents of the general theory including evolutionary Humanists characterize it as that.

religious.[213] A recent Indiana court decision, *Hendren v. Campbell*,[214] found a textbook presenting both the model of scientific creationism and the general theory of evolution to establish religion for a similar reason. The state textbook commission had determined that the text fairly presented two theories of origins and that its adoption did not violate the First Amendment.[215] The plaintiffs to the suit characterized the book as "blatently [*sic*] sectarian and partisan" because of "inherently religious and sectarian material contained throughout the text to the objective exclusion of other biological theories respecting human development."[216] The material allegedly was religious because the textbook refers to a "Creator" at several places and adverts to "the Genesis account" and "biblical creationism"; it indicates its consistency with "Christian perspectives" and evaluates scientific creationism in several sections as a superior explanation of observed facts.[217] The state trial court determined that the "book is replete . . . with references to biblical topics . . . as being the only correct viewpoint to be considered";[218] it also held that "the text consistantly [*sic*] presents crea-

213. One commentator argues that "creation . . . presupposes a creator the existence of which is empirically unverifiable. Because acceptance . . . must be a matter of faith, it is a *religious* doctrine the teaching of which in the public schools presents insurmountable obstacles under both the free exercise and establishment clauses . . . ." LeClercq, *The Monkey Laws and the Public Schools: A Second Consumption?*, 27 VAND. L. REV. 209, 228 (1974) (footnote omitted; emphasis in original). This definition of "religious doctrine" would exclude many subjects taught in public schools, because many matters cannot be proved empirically and many others cannot be conclusively verified though they can be reasonably substantiated. The general theory provides one example of such a nonverifiable and nonobservable topic of instruction. *Cf.* Birch & Ehrlich, *Evolutionary History and Population Biology*, 214 NATURE 349, 352 (1967) ("Our theory of evolution has become . . . one which cannot be refuted by any possible observations. It is thus 'outside of empirical science' . . . ."); Dobzhansky, *On Methods of Evolutionary Biology and Anthropology*, 45 AM. SCIENTIST 381, 388 (1957) ("The applicability of the experimental methods [to evolution] . . . is severely restricted before all else by the time intervals involved, which far exceed the lifetime of any human experimenter.") "Matters of faith" are not necessarily religious doctrines, and teaching unproved things is not forbidden by the religion clauses.)

214. No. S577-0139 (Super. Ct. Ind. Apr. 14, 1977), *excerpted in* 45 U.S.L.W. 2530 (May 17, 1977).

215. Commission on Textbook Adoption, *supra* note 7. The commission noted that "[t]he textbook states that neither theory is subject to scientific verification." *Id. See* BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197, at 470, xxii, xviii.

216. Complaint at 4, Hendren v. Campbell, No. S577-0139 (Super. Ct. Ind. Apr. 14, 1977); Memorandum in Support of Motion for Preliminary Injunction at 3, *id.*

217. Memorandum in Support of Motion for Preliminary Injunction at 3, 4, 8-9, 10, *id.* The state school superintendent described the suit as "a Scopes trial in reverse," because advocates of the general theory excluded creation from public schools much as adherents to creation in some areas once excluded evolution. Washington Star, Feb. 16, 1977, § 1, at A-6, col. 6. The situations differ, however, in that Indiana neither required presentation of creation nor excluded discussion of the general theory.

218. Hendren v. Campbell, No. S577-0139, mem. op. at 10. The court framed the issue as "whether a text obviously designed to present only the view of Biblical Creationism in a favorable light is constitutionally acceptable in the public schools." *Id.* at 19. The

tionism in a positive light and evolution in a negative posture."[219]

The opinion confounds two very distinct lines of analysis under the establishment clause. One is that the text presents a religious doctrine of creation by discussing a creator, an act of creation, design in nature, and a worldwide flood, which cannot be distinguished from instruction directly out of *Genesis*. The other is that the book favors creation over the general theory, and consequently lacks neutrality between nonreligious theories that harmonize or conflict with some religious beliefs.

The superior court's characterization of the text's contents as primarily religious, however, is based on insufficient evidence,[220] because mention of a creator and design, harmony with some religions, and assessments more often favorable to the scientific merit of creation over the general theory are not prohibited by the establishment provision. The doctrinally distinct concern with the biology book's partiality to one nonreligious theory over another, moreover, is also misdirected, because scientific instruction that does not always extend equally favor-

decision never addressed the key issue, whether the textbook presents a biblical doctrine rather than scientific creationism, and simply used the terms interchangeably. The court took nearly all of the quotations in the opinion from the preface rather than the text material of *Biology: A Search for Order in Complexity*, even though ordinarily students would not use the former. Neither the textbook nor the teachers' guide presents "Biblical Creationism." *See* note 220 *infra*.

219. Hendren v. Campbell, No. S577-0139, mem. op. at 6 (Super. Ct. Ind. Apr. 14, 1977). The court devoted five pages to examples of nonreligious statements in the textbook that conclude that scientific creationism corresponds with particular scientific observations more closely than does the general theory. *Id.* at 5-9.

220. The book in question, *Biology: A Search for Order in Complexity*, contains a relatively insignificant number of references to deity, the Bible, or similar subjects in its 622 pages of text and introductory material and its approximately 230,000 words. It adverts only 25 times to "God"; 13 of these are found in statements that science cannot prove the existence or study the characteristics of the supernatural, while six occur in quotations from famous past biologists. The text does not expound the Bible; it quotes only two phrases and one chapter citation, none from *Genesis*, and mentions the "Bible," "*Genesis*," or "biblical" only on 12 occasions. It refers to a "creator" only 19 times and to Bible personages only 10 times. *See* BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197.

The teachers' edition, which *Hendren* also cited, similarly is not replete with Bible doctrine. It refers to "God" and the "Bible" each only five times (with no biblical quotations) and to "Creator" only twice. *See* TEACHERS' GUIDE (rev. ed. O. Fischbacher, R. Paisley & W. Tinkle 1974) (to accompany BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197).

Probably the most controversial statement, occurring in the student book's preface rather than its text, is the "hope" that the book "will be attractive first of all to the many private schools directed by those seeking to maintain an educational philosophy and methodology consistent with traditional Christian perspectives. We trust it will also be of interest and use in public school systems . . . to develop a genuine scientific attitude . . . ." BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197, at xxiii. This excerpt does not say that the textbook contains Christian doctrine, but that hopefully the book will be useful to some Christian as well as public schools. On the other hand, it does emphasize the scientific orientation of the text.

able treatment to one theory does not contravene the First Amendment. Because of these underlying analytic errors, the determination in *Hendren* that scientific creationism has a religious primary effect appears to be incorrect. Even if the decision were correct about this particular textbook, however, a model of scientific creationism and critique of the general theory nonetheless could be constructed from scientific discussion of empirical evidence divorced from theological reasoning and terminology. A textbook, moreover, very possibly could give a dispassionate and nondogmatic treatment of this model along with the general theory of evolution without violating the establishment clause.

2. *Legislative Purpose*

Neutralization by means of instruction in scientific creationism also would not necessarily have a legislative purpose of furthering religious rather than secular concerns that would contravene the establishment clause. The Supreme Court in *McGowan v. Maryland*[221] held that enactment of a Sunday closing law has the secular purpose of providing a "common day of rest" and not a nonsecular purpose of aiding religion,[222] despite the harmony of that statute with exercise of many religions.[223] Similarly, addition of scientific creationism to a biology course that exclusively teaches the general theory has the secular legislative purpose of presenting more than one nonreligious explanation of the origin of the world and life. Even Clarence Darrow of *Scopes* trial fame[224] remarked that it is "bigotry for public schools to teach only one theory of origins."[225]

Incorporation of that model also has the secular legislative purpose of restoring substantial neutrality by alleviating a burden on free exercise.[226] As Professor Katz argued, neither the establishment pro-

221. 366 U.S. 420 (1961).

222. *Id.* at 451-52.

223. *See id.* at 431-34, 442. Similarly, adoption of a national anthem including the phrase " 'In God is our trust' " had a secular legislative purpose though it harmonized with many religions' views. Sheldon v. Fannin, 221 F. Supp. 766, 774 (D. Ariz. 1963). And addition of the words "under God" to the pledge of allegiance also did not contravene the establishment clause despite its consistency with sectarian belief. Smith v. Denny, 280 F. Supp. 651, 654 (E.D. Cal. 1968), *appeal dismissed*, 417 F.2d 614 (9th Cir. 1969). *See* Abington School Dist. v. Schempp, 374 U.S. 203, 303-04 (1963) (Brennan, J., concurring); Engel v. Vitale, 370 U.S. 421, 440-41 n.5 (1962) (Douglas, J., concurring).

224. Scopes v. State, 154 Tenn. 105, 289 S.W. 363 (1927) (upholding law forbidding presentation of evolution in public schools and requiring instruction in divine creation).

225. R. O'Bannon, Creation, Evolution and Public Education 5, Dayton Symposium on Tennessee's Evolution Laws (May 18, 1974).

226. Justice Brennan, concurring in Abington School Dist. v. Schempp, 374 U.S. 203, 295 (1963), wrote that "nothing in the Establishment Clause forbids the application of

vision nor the separation of church and state concept "preclude[s] action to avoid restraints on religious freedom."[227] The state particularly can alleviate an existing abridgment of free exercise arising from unneutral state action.[228] Accommodation of religious exercise can involve affirmative governmental action without violating the secular purpose requirement.[229] For example, the Supreme Court in *Zorach v. Clauson*[230] sustained accommodation of free exercise through a released-time program, even though that involved affirmative provision and affected nonparticipating students as well.[231] The courts, moreover, have upheld the constitutionality of regulations under Title VII of the Civil Rights Act of 1964 requiring "reasonable accommodations to the religious needs of employees."[232] Thus addition of scientific creationism, viewed in light of the state-created abridgment of free exercise, merely restores neutrality.[233]

The state court in *Hendren* misapplied this secular purpose test. It found the biology textbook to contravene the establishment clause because of the publisher's purpose in printing the book rather than the legislative purpose in selecting it.[234] The court did not use the pub-

legislation having purely secular ends in such a way as to alleviate burdens upon . . . free exercise." Hence action "to prevent a public welfare program from abridging . . . free exercise" does not have a "purpose . . . in any way religious." *Id.* at 303. Provision of a released-time program similarly has the secular purpose of "accommodation" of parental interests and student exercises. Smith v. Smith, 523 F.2d 121, 124 (4th Cir. 1975), *cert. denied*, 423 U.S. 1073 (1976). *See* note 183 *supra*.

227. Katz, *supra* note 176, at 428.

228. State v. Yoder, 49 Wis. 2d 430, 444, 182 N.W.2d 539, 545 (1971), *aff'd sub nom.* Wisconsin v. Yoder, 406 U.S. 205 (1972) ("The 'free exercise neutrality' may require a state to make special provisions for religious interests in order to relieve them from both direct and indirect burdens . . . by increased governmental regulations." (footnote omitted)).

229. *See* note 184 *supra*.

230. 343 U.S. 306 (1952).

231. *Id.* at 309 (ordinary academic instruction was cancelled during hour program).

232. EEOC Guidelines on Discrimination Because of Religion, 29 C.F.R. § 1605.1(b) (1976). *See* Civil Rights Act of 1964, § 716(a), 42 U.S.C. § 2000e-2(e) (1970). This requirement has been upheld against attack under the establishment clause. Cummins v. Parker Seal Co., 516 F.2d 544, 552-54 (6th Cir. 1975), *aff'd mem. by an equally divided Court*, 429 U.S. 65 (1976); Ward v. Allegheny Ludlum Steel Corp., 397 F. Supp. 375, 377 (W.D. Pa. 1975); Scott v. Southern Cal. Gas Co., 7 Fair Empl. Prac. Cas. 1030, 1036 (C.D. Cal. 1973). The Supreme Court did not address the establishment issue when it recently construed this provision in Trans World Airlines, Inc. v. Hardison, 97 S. Ct. 2264 (1977).

233. One article proposed that "[w]here the only interests supporting legislation are religious or nonsecular, as in *Epperson*, the presumption of invalidity should be conclusive." LeClercq, *supra* note 213, at 216. Such a test for legislative purpose would prevent legislative alleviation of any abridgment of free exercise and would perpetuate infringements of religious liberty, unless some group other than the burdened religious group supported the remedial legislation.

234. The court wrote that "[c]learly, the purpose of *A Search for Order in Complexity* is the promotion and inclusion of fundamentalist Christian doctrine in the public schools. The publishers . . . admit that this text is designed to find its way into the

lisher's statement merely as a basis for inference of the legislative intent; rather, it assumed that the relevant intent in applying the nonsecular purpose test was that of the publisher. Even use for an inference would be questionable, however, unless the publisher or writer sat on the textbook commission that approved the book. Proof of the religious convictions of an author tells nothing about whether his novel, philosophic essay, or science textbook is religious in nature rather than merely consistent with his faith or whether public school authorities adopted it for religious rather than secular purposes.[235]

Instruction in scientific creationism thus conforms to the substantial neutrality standard. Its religious implications and its accommodation and restoration of free exercise do not cause an unconstitutional primary effect or a prohibited legislative purpose.

The federal district courts in *Wright* and *Daniel*[236] were correct in stating that "equal attention and emphasis" to all religious theories of origins would be "patently unreasonable."[237] Public schools in science class, however, may teach only those explanations of origins that are nonreligious in nature and are presented through scientific discussion. Those classes do not have to offer any particular scientific explanation, and courts would not initiate such a requirement. Scientific creationism not only offers a nonreligious and scientific model of origins, but also appears substantially consistent with the views of most religions that object to the general theory of evolution, because its terms generally are divorced from particular theological conceptions of deity or sacred authority.[238] Hence adoption of scientific creationism

public schools to *stress* Biblical Creationism." Hendren v. Campbell, No. S577-0139, mem. op. at 19 (Super. Ct. Ind. Apr. 14, 1977) (emphasis in original). It cited statements by the publisher of the text, and by a creationist research organization and a Christian college (which the court confused with the sponsor of the book, the Creation Research Society), to show "the purpose" of the textbook. *Id.* at 4-5. The superior court provided no other evidence as to the legislative purpose, either from textbook commission minutes or school authorities. Its sole discussion of the legislative purpose test assessed "the purpose of *A Search for Order in Complexity*."

235. Vonnegut's intent to give religious comment did not render assignment of *Slaughterhouse-Five* an establishment of religion. Todd v. Rochester Community Schools, 41 Mich. App. 320, 200 N.W.2d 90 (1972). Tolstoy's religious purpose in writing *War and Peace*, or Wallace's in writing *Ben Hur*, would not prevent selection of those books for public school use.

236. Daniel v. Waters, 399 F. Supp. 510, 511-12 (M.D. Tenn. 1975), *on remand from* 515 F.2d 485 (6th Cir. 1975).

237. *Id.* (dictum); Wright v. Houston Independent School Dist., 366 F. Supp. 1208, 1211 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974) (dictum).

238. *See* BIOLOGY: A SEARCH FOR ORDER IN COMPLEXITY, *supra* note 197, at xvii, xxii ("There are essentially only two philosophic viewpoints of origins among modern biologists—the doctrine of evolution and the doctrine of special creation"—"though several variants of each have been developed.") While there are differences on some issues be-

as a countervailing theory would not involve the impracticality of presenting all religious doctrines of creation.

A public school course that presents both the general theory and scientific creationism would not infringe the free exercise of noncreationist students, though one theory would be contrary to their viewpoint, just as it would not infringe the religious liberty of creationists.[239] Each would confront alternate nonreligious viewpoints rather than an exclusive state-endorsed perspective on the origin of the world and life.

Neutralization would protect individual free exercise but also would affect governmental education interests to a greater degree than would exemption. This method of relief would remove a substantial abridgment of religious exercise, by ending the types of burdens and the forms of coercion arising from exclusive instruction in the general theory, and so would constitute a less burdensome means of state regulation. However, neutralization would bring interference with state interests in autonomy and innovation in public school biology curricula,[240] although it would not affect governmental presentation of the general theory. Because scientific creationism would not require any more attention than the general theory, which does not occupy a large proportion of course hours,[241] and might be introduced as a unit

tween adherents to special creation, there also are disagreements between advocates of the general theory. Neither prevents presentation of that model of the origin of the world and life.

239. Public schools would need to exempt any individual if presentation of scientific creationism along with the general theory sincerely abridged free exercise of his religion. For the same reason that a few students might find any exposure to the general theory in conflict with their religious convictions, although it is a nonreligious concept and even though the class is neutralized, a few others might find any exposure to scientific creationism in violation of their religious convictions, although it also is nonreligious and neutral. Neutralization would not alleviate abridgment of religious exercise for absolute separatists, and so they also would have to be exempted from any exposure to the general theory. However, only a small minority of separatists are absolute separatists (numbering only one of the creationist religions discussed in notes 21-22 *supra*, Apostolic Lutherans), and exemption probably would be entirely acceptable to such faiths. Hence interference with public school classrooms from these exemptions would not be very significant. If a science instructor objected to presentation of scientific creationism, a substitute teacher might be brought in to offer a unit in that model.

240. Interference with governmental interests might be minimized by neutralization in an alternate class rather than in all biology classes. This class might present one or more additional nonreligious concepts of the origin of the earth and life, while another existing class might continue offering only the general theory.

241. Most biology classes devote a relatively small portion of class hours to the general theory, although those hours are not in a block since the general theory ordinarily pervades a great deal of the course material. *Compare* note 104 *supra with* notes 26-30 *supra*. Three scientific creationist textbooks suggest either that biology classes devote a three week unit to that model or discuss it whenever the general theory is discussed. SCIENTIFIC CREATIONISM, *supra* note 190, at iv-v; R. Bliss, Teachers' Guide to *Origins* 5-10

rather than at many points within the course,[242] neutralization would not affect the state interest in the predominant part of the course.

C. *Elimination*

Removal of a topic that burdens free exercise of religion from a public school course or removal of a similarly burdensome academic discipline from the school curricula might alleviate an abridgment of religious freedom. Hence elimination of the general theory of evolution from a biology course and elimination of instruction in biology are additional methods of relief for infringement of creationist beliefs and separatist practices.

The state has authority to remove instruction in a particular topic from a public school course. Exclusion of any discussion of birth control from biology and sex education courses was sustained by a federal district court in *Mercer v. Michigan State Board of Education*,[243] and the Supreme Court affirmed the decision.[244] A public school biology teacher challenged the statute as an infringement of his First Amendment rights.[245] Although the governmental action in eliminating discussion of birth control harmonized with the tenets of some religions and affirmatively accommodated free exercise of those faiths,[246] the district court held that it did not contravene the establishment clause and was facially valid.[247]

The state furthermore holds power to eliminate teaching in an academic discipline from public school curricula. The Constitution does not require states to institute public schools.[248] Upon creating public education government may choose not to present some areas of

(1976); H. Morris, *supra* note 12, at 3. Although presentation of scientific creationism may not require the equivalent of three weeks, even that would be less than 10% of class time, because most high school biology courses last for a full academic year. *See* L. Osterndorf & P. Horn, *supra* note 76, at 74, 157. Hence addition of scientific creationism to a biology course would interfere with the state interest in less than 10% of the course.

242. H. Morris, *supra* note 12, at 3, 5. Three of the four scientific creationist classroom books are designed as supplements to existing courses, and so are easily adaptable to presentation as a unit within a course.

243. 379 F. Supp. 580 (E.D. Mich.), *aff'd mem.*, 419 U.S. 1081 (1974).

244. 419 U.S. 1081 (1975).

245. 379 F. Supp. at 584.

246. Many religions oppose sex education and particularly birth control instruction. *See, e.g.*, Cornwell v. State Bd. of Educ., 314 F. Supp. 340 (D. Md. 1969), *aff'd*, 428 F.2d 471 (4th Cir.), *cert. denied*, 400 U.S. 942 (1970); Hopkins v. Hamden Bd. of Educ., 29 Conn. Supp. 397, 289 A.2d 914 (C.P. 1971).

247. 379 F. Supp. at 586, 587.

248. San Antonio School Dist. v. Rodriguez, 411 U.S. 1, 35 (1973); *see* Goss v. Lopez, 419 U.S. 565, 574 (1975).

human knowledge, and indeed must.[249] After presenting a discipline the state can decide to cease teaching it.[250]

The judiciary has authority to order elimination of a governmental program or requirement that violates free exercise, although this authority is more limited than legislative power.[251] The Supreme Court has invalidated a prescribed oath for state office[252] and mandatory attendance at public schools;[253] the judiciary has eliminated educational standards imposed on secondary and elementary schools.[254] Similarly, the Supreme Court eliminated under the establishment clause public school Bible reading,[255] classroom prayer,[256] and a released-time program.[257]

In *Epperson v. Arkansas*[258] the Supreme Court overturned a state law that forbade instruction in evolution in any state-funded schools. The statute prohibited only the evolutionary theory,[259] and effectively left *Genesis* as "the exclusive source of doctrine as to the origin of man."[260] Moreover, the legislature enacted the statute for the "sole reason" of requiring exclusive presentation in public schools of "fundamentalist sectarian conviction."[261] This violated the establishment clause, which requires a primary effect of "neutrality between religion and religion, and between religion and nonreligion,"[262] and a

249. Mercer v. Michigan State Bd. of Educ., 379 F. Supp at 586 ("The authorities must choose which portions of the world's knowledge will be included in the curriculum's programs and courses, and which portions will be left for grasping from other sources . . . .")

250. Justice Black acknowledged state power to terminate public school instruction in a field.

> It is plain that a state law prohibiting all teaching of human development or biology is constitutionally quite different from a law that compels a teacher to teach as true only one theory of a given doctrine. It would be difficult to make a First Amendment case out of a state law eliminating the subject of higher mathematics, or astronomy, or biology from its curriculum.

Epperson v. Arkansas, 393 U.S. 97, 111 (1968) (Black, J., concurring). Hence "there is no reason . . . why a State is without power to withdraw from its curriculum any subject deemed too emotional and controversial for its public schools." *Id.* at 113.

251. Tinker v. Des Moines Independent Community School Dist., 393 U.S. 503, 507 (1969).

252. Torcaso v. Watkins, 367 U.S. 488 (1961).

253. Pierce v. Society of Sisters, 268 U.S. 510 (1925).

254. State v. Whisner, 47 Ohio St. 2d 181, 351 N.E.2d 750 (1976).

255. Abington School Dist. v. Schempp, 374 U.S. 203 (1963).

256. Engel v. Vitale, 370 U.S. 421 (1962).

257. McCollum v. Board of Educ., 333 U.S. 203 (1948).

258. 393 U.S. 97 (1968).

259. *Id.* at 99 n.3.

260. *Id.* at 107. *See id.* at 109.

261. *Id.* at 103, 108. *Cf. id.* at 107-08 (The law was not "justified by considerations of state policy other than the religious views of some of its citizens. . . . [F]undamentalist sectarian conviction was and is the law's reason for existence.")

262. *Id.* at 104. The state "must be neutral in matters of religious theory, doctrine, and practice," and "may not be hostile to any religion." *Id.* at 103-04. Justice Harlan

legislative purpose of secular concern rather than nonsecular enactment of "the religious views of some of its citizens."[263] Exclusion of evolution was unneutral because the law did not also exclude other viewpoints such as biblical creation, though it did not require presentation of *Genesis*.[264] It was nonsecular because the statute proscribed evolution "*for the sole reason* that it is deemed to conflict with a particular religious doctrine" that was expected still to be taught.[265] Although the Court overturned elimination of a public school subject in these circumstances, it specifically acknowledged governmental power to determine academic curricula,[266] and indicated the state's authority to eliminate instruction in origins from public schools through neutral means and a nonreligious purpose.[267]

Elimination of the general theory from a public school course would

emphasized that the neutrality concept was central in *Epperson*. *Cf.* Welsh v. United States, 398 U.S. 333, 362 n.15 (1970) (Harlan, J., concurring) (underinclusiveness of curriculum proscription). *See* Smith v. Smith, 523 F.2d 121, 122 n.2 (4th Cir. 1975), *cert. denied*, 423 U.S. 1073 (1976).

263. Epperson v. Arkansas, 393 U.S. at 107.

264. *Id.* at 109 ("Arkansas' law cannot be defended as an act of religious neutrality" because the state "did not seek to excise from the curricula of its schools and universities all discussion of the origin of man," but only to bar "a particular theory.")

265. *Id.* at 103 (emphasis added). *See id.* at 107 (state may not "prohibit . . . the teaching of a scientific theory or doctrine *where that prohibition is based* upon reasons that violate the First Amendment" (emphasis added)); *id.* at 109 (it may not "blot out a particular theory *because of* its supposed conflict with the Biblical account" when that account still may be offered (emphasis added)).

266. *Id.* at 105, 107.

267. The law apparently would have represented "religious neutrality" if the state had "excise[d] from the curricula of its schools . . . all discussion of the origin of man" on the basis of a secular purpose. *Id.* at 109. The concurring opinion of Justice Black underscores the constitutionality of a law applying neutrally to all concepts of origins. *Id.* at 113.

In Joseph Burstyn, Inc. v. Wilson, 343 U.S. 495 (1952), the Court's opinion stated in dictum that "the state has no legitimate interest in protecting any or all religions from views distasteful to them . . . ." *Id.* at 505. This language is occasionally cited for the proposition that public schools cannot exclude the general theory. *E.g.*, Wright v. Houston Independent School Dist., 366 F. Supp. 1208, 1211 (S.D. Tex. 1972), *aff'd per curiam*, 486 F.2d 137 (5th Cir. 1973), *cert. denied*, 417 U.S. 969 (1974); LeClercq, *supra* note 213, at 216 n.46. The *Burstyn* case actually held that state censorship of motion pictures abridges freedom of speech and press, 343 U.S. at 505, and did not implicate free exercise of religion. This is why the quoted sentence continues that protection from distasteful views is not "sufficient to justify prior restraints upon the expression of those views." *Id.* The Court did not rule on other issues such as the establishment question. *Id.* at 499. The case did not involve impressionable public school students in a state-created institution, but the general public.

In *Wright* the district court concluded that "[t]eachers of science in the public schools should not be expected to avoid the discussion of every scientific issue on which some religion claims expertise." 366 F. Supp. at 1211. This misses the point. Contrariety to religious beliefs and an unconstitutional restraint upon students' free exercise, not scientific "expertise" claimed by the religion, provides the rationale for elimination. And governmental abridgment of their religious liberty, not a private citizen's "discussion" of an issue, justifies governmental alleviation of the burden.

be constitutionally permissible, just as exclusion of birth control from a biology class was consistent with the establishment provision, so long as the legislative purpose was secular. Exclusion of biology from the curricula also would be within state competence, in the same way that a prior decision not to offer biology would stand against challenge. Neither form of elimination would offend the constitutional rights of teachers,[268] parents,[269] or students.[270]

Elimination would not have a legislative purpose of furthering

268. While "[i]t can hardly be argued that . . . teachers shed their constitutional rights to freedom of speech or expression at the schoolhouse gate," Tinker v. Des Moines Independent Community School Dist., 393 U.S. 503, 506 (1969), the state does not shed its interest in public school curricula when the teacher enters the schoolhouse. The difference in roles of public school and university level teachers, and the difference in maturity of students at those levels, necessitate a less expansive degree of "academic freedom" for secondary and elementary school instructors. Mailloux v. Kiley, 323 F. Supp. 1387, 1392 (D. Mass.), *aff'd*, 448 F.2d 1242, 1242 (1st Cir. 1971). Thus the Supreme Court has mentioned the concept of academic freedom primarily at the university level. Healy v. James, 408 U.S. 169, 180-81 (1972) (citing cases); T. EMERSON, *supra* note 34, at 598-611. And courts have recognized greater authority of secondary and elementary schools over the classroom presentation. Parker v. Board of Educ., 237 F. Supp. 222, 229-30 (D. Md.), *aff'd*, 348 F.2d 464 (4th Cir. 1965), *cert. denied*, 382 U.S. 1030 (1966); Schauer, *School Books, Lesson Plans, and the Constitution*, 78 W. VA. L. REV. 287, 305 (1976); Comment, *The Dwindling Rights of Teachers and the Closing Courthouse Door*, 44 FORDHAM L. REV. 511, 521-24 (1975). Consequently at these levels "nothing . . . gives a person employed to teach the Constitutional right to teach beyond the scope of the established curriculum." Mercer v. Michigan State Bd. of Educ., 379 F. Supp. 580 (E.D. Mich.), *aff'd mem.*, 419 U.S. 1081 (1974). *See* Epperson v. Arkansas, 393 U.S. 97, 113-14 (1968) (Black, J., concurring); Brubaker v. Board of Educ., 502 F.2d 973, 984-85 (7th Cir. 1974), *cert. denied*, 421 U.S. 965 (1975); Goldstein, *The Asserted Constitutional Right of Public School Teachers To Determine What They Teach*, 124 U. PA. L. REV. 1293, 1339-49, 1355-56 (1976).

269. The Court articulated a parental interest in the education of children in Meyer v. Nebraska, 262 U.S. 390 (1923); Bartels v. Iowa, 262 U.S. 404 (1923), and Pierce v. Society of Sisters, 268 U.S. 510 (1925). In *Meyer* and *Bartels* the Supreme Court invalidated state laws that proscribed instruction in the German language in parochial and sectarian schools, but did not limit "the State's power to prescribe a curriculum for institutions which it supports." Meyer v. Nebraska, 262 U.S. at 402. In *Pierce* the Court overturned a statute that applied only to students in nonpublic schools, but did not rule on state authority over public school curricula. *See* Mercer v. Michigan State Bd. of Educ., 379 F. Supp. 580, 586 (E.D. Mich.), *aff'd mem.*, 419 U.S. 1081 (1974).

270. A federal appellate court recently ruled that a school board's action in removing two books from a school library abridged the students' "right to know and to receive information." Minarcini v. Strongsville City School Dist., 541 F.2d 577, 583 (6th Cir. 1976). It found that action arbitrary and without rational basis because the board offered no explanation. *Id.* at 580, 581. This case, however, "abruptly departs from precedents in this area" in positing a "right" that no other case recognizes for secondary school students. 45 FORDHAM L. REV. 1236, 1244, 1246 (1977). Another circuit court sustained identical school board action against a challenge based on students' First Amendment rights. Presidents Council, Dist. 25 v. Community School Bd. No. 25, 457 F.2d 289, 291-92 (2d Cir.), *cert. denied*, 409 U.S. 998 (1972). It found a rational basis for removal of the book in its unsuitability for students of that maturity level. *See id.* at 291. *Minarcini*, moreover, would not apply to elimination of the general theory, because it did not involve exclusion of a topic from classroom discussion, 541 F.2d at 584, while it did recognize school board "curriculum and textbook control" in the board's decision not to use the books as texts, *id.* at 579-80.

religious rather than secular concerns, which would contravene the establishment clause,[271] although as in *Mercer* it would harmonize with the tenets of some religions and avert a burden on some individuals. Prior governmental action imposed the burden on free exercise, and elimination would alleviate this burden.[272] Professor Kalven observed that the state would have a rational secular basis for eliminating instruction of the general theory if it determined that instruction in that theory tended to destroy religious beliefs of adolescent and preadolescent students,[273] and Justice Black noted that it would have a legitimate purpose in removing study of biology from public schools.[274] Either course of action would differ significantly from the situation in *Epperson,* because all concepts rather than just one of the origin of life would be eliminated from public school classrooms, and reasons other than enactment of sectarian doctrines would impel elimination of the general theory.[275]

271. The circuit court in *Wright* noted that "[f]ederal courts cannot . . . prevent teaching the theory of evolution in public school for religious reasons." Wright v. Houston Independent School Dist., 486 F.2d 137, 138 (5th Cir. 1973), *cert. denied,* 417 U.S. 969 (1974). Although this is undoubtedly true, public school authorities *can* exclude the general theory for *secular* reasons.

One secular legislative purpose for elimination would be to avert state-sponsored destruction of religious beliefs and violation of religious practices of adolescent and younger students. *See* note 273 *infra.* Another such purpose would be to alleviate a burden on free exercise. *See* notes 183 & 184 *supra.* A final secular purpose for elimination of the general theory would be to avoid public school instruction in a false theory. *See* Goldstein, *supra* note 268, at 136. Some noncreationists, as well as creationists, question the validity of the general theory, *see* note 210 *supra,* and at least one noncreationist advocates elimination of the Darwinian theory from public schools. His conclusion, on the basis of his scientific assessment rather than religious precept, that no theory at all is preferable to the general theory of evolution supports this secular rationale for elimination. Macbeth, *A Third Position in the Textbook Controversy,* 38 AM. BIOLOGY TCHR. 495 (1976).

272. Introduction of instruction in the general theory did not have a legislative purpose or primary effect of advancing religious Humanism or other religious beliefs. For the same reason, elimination of instruction in that concept would not advance religion; it restores free exercise. It too has a secular purpose despite its secondary religious effect.

273. If a state "legislature reasoned thus—evolution may be an engaging scientific theory, but, if taught prior to university level, it tends regardless of the intention of the teacher to upset the young and to destroy their religious beliefs," and because "these are values entitled to consideration from the legislature" it banned the teaching of evolution at these lower educational levels—"its judgment could not be easily upset." Kalven, *A Commemorative Case Note*: Scopes V. State, 27 U. CHI. L. REV. 505, 517 (1960).

274. *See* note 250 *supra.*

275. Courts very rarely find establishment of religion on the basis of a nonsecular legislative purpose. Goldstein, *supra* note 268, at 1310 n.57. Instead, most establishment cases rest upon a primary effect of aid (or opposition) to religion or excessive entanglement with religion. This indicates that a finding of a nonsecular purpose requires that the *predominant* reason for the statute is advancement of religion, or perhaps even the *sole* reason as the Court found true in *Epperson. See* McGowan v. Maryland, 366 U.S. 420, 444-49 (1961) (upholding Sunday closing laws despite partially religious reason for enactment). Hence a statute has a secular purpose if there is substantial nonreligious reason

The elimination remedy might protect individual free exercise as effectively as neutralization, countering each form of restraint and each type of coercion,[276] but it would interfere with the governmental curricular interest to a greater degree. Elimination would obstruct the state concern in presentation of the general theory,[277] something which neutralization would not affect, although it might not interfere with the governmental interest in autonomy and innovation for the remaining parts of the course or the interest in instruction in biology.[278]

Conclusion

Comparison of these alternative remedies in light of their protection of religious liberty and impact upon state educational interests suggests that the preferred remedy in secondary schools is neutralizing instruction in the origin of the world and life or, in exceptional circumstances, exempting students from a block of classes (if the text and instructor present the general theory only in a single unit). The preferred approach in elementary schools is neutralizing course material or excluding the general theory. These preferred remedies would alleviate the unconstitutional burden on free exercise from exclusive presentation of the general theory and counter substantial coercion against religious liberty, and yet would avoid the greater interference with governmental interests from elimination of biology instruction and steer clear from the proscriptions of the establishment clause.

for its enactment, even if a legislative intent to advance religious interests is also possibly present.

276. Removal of the general theory from biology courses would not impair the public benefit for creationist students and would reduce its value only partially for other pupils, whereas elimination of biology from school curricula would deprive all students of the public benefit of instruction in that field.

277. Interference with governmental interests might be minimized by elimination of instruction in a particular topic, the general theory, in only an alternate class. Another existing biology class might continue presentation of the general theory.

278. Elimination of the general theory of evolution would not interfere with the rest of a biology course, while by contrast elimination of biology itself would frustrate the governmental interest in the entire course.